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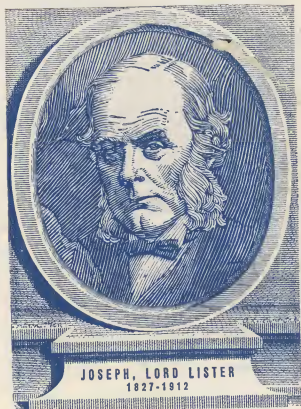
VOLUME 17
NUMBER 8

AUGUST
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A PATRIOT NEVER DIES

By FRANK PATTON





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Front cover painting by Robert Fuqua, illustrating a scene from "A Patriot Never Dies"

Back cover painting by Frank R. Paul illustrating "Stories of the Stars"

Illustrations by A. K. Bilder, Julian, Malcolm Smith, Ned Hadley, Hadden, H. W. McCauley, Joe Sewell

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STORIES
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1944

Published monthly by ZIFF-DAVIS PUBLISHING COMPANY at 545 North Michigan Avenue, Chicago, Ill. New York Office, 229 Madison Ave., New York City. Washington Office, 1410 K Street, N.W., Washington, D. C. Berlin Office, 1000 Broadway, New York, N.Y. London Office, 100, Strand, London, W.C.2, England. Paris Office, 10, rue de la Harpe, Paris, France. Toronto Office, 100, King Street West, Toronto, Canada. Montreal Office, 100, Rue Saint-Jacques, Montreal, Canada. Boston Office, 100, State Street, Boston, Mass. Chicago Office, 100, North Dearborn Street, Chicago, Ill. All communications about subscriptions should be addressed to the Director of Circulation, ZIFF-DAVIS Publishing Company, 545 North Michigan Ave., Chicago, Ill.

Volume 17
Number 8

The OBSERVATORY

by THE Editor

A GOOD many months ago, AMAZING STORIES ran the first story of a new author, a fellow by the name of Craig Ellis. It was "Doctor Varsag's Strange Experiment." Last month we scheduled the second Varsag story by Ellis, but it got side-tracked somehow, and didn't appear. However, the new story is in this issue. It's "Dr. Varsag's Second Experiment." Actually, it isn't Dr. Varsag, because he died in the first story. It's the second Dr. Varsag. And it isn't the second experiment of any one doctor, but it is a second experiment. So if you feel the title doesn't quite fit, then try for yourself to find room to print "The Second Dr. Varsag's First Experiment," or better still, make any sense out of it!

BYOND all that, though, we predict you'll find that Craig Ellis has written a story that is worthy of the reputation you hung on him with his first yarn. We regret that we will have no more stories from this fine writer until after the war—and do we have to tell you the reason? Good luck, Craig!

NO DOUBT you've heard that magazines all over the country are jacking American flags

on their covers for the issue on sale July 4th. Well, that's why a flag appears on our cover this month. We claim the distinction of presenting a rather unusual American flag, however, since it is the famous flag with thirteen stars in a circle which our soldiers fought for in the Revolution. We claim also, to have secured a really fine story, written to fit this flag cover, by an author we practically had to drag out of his laboratory to write for us! Frank Patton has done a marvelous job of "A Patriot Never Dies." And Robert Fuqua has done a marvelous job of cover painting for our "special" flag issue.

SOME months ago we got hold of a new writer for our companion magazine, *Mammoth Detective* who did some fine detective stuff for us. Finally we asked him to try an amazing story. He did, and the result is "The Degenerate Mr. Smith." When you read this story, get ready to classify it as one of the really fine stories of the year. And it has a message, too. We don't remember when a science fiction writer has ever handled satire or pictured a future possibility with more skill. Take it from us, here's a "different" story!

NEW authors seem to be the order of the day. "Pop Gun" by Francis Wilson Powell is another product of a newcomer, and it is a space story written with all the expertness of our top-notch boys. You'll like its scientific accuracy.

"PRISON In Space" is newcomer Henry Norton's latest offering. We place it strictly on its own, because we believe it can stand up without any props. A very nice space story, told in a very convincing manner.

SHORTEST story of the issue is Leroy Verxa's "The Spirit of Egypt." We don't know if it's the "spirit" or not, but we'd hate to meet it on a dark night—or in the daytime for that matter. Not this spirit!

LEE FRANCIS pulled a fast one on us this month. He wrote a fantasy in a scientific (Continued on page 152)



"Just think, Gertrude, five more payments and you'll be mine."

THE GREATEST
POWER ON
EARTH /



The Magic of Mind

WERE the great personages of the past victims of a stupendous hoax? Could such eminent men of the ancient world as Socrates, Pericles, and Alexander the Great have been deluded and cast under the spell of witchcraft—or did the oracles whom they consulted actually possess a *mysterious faculty of foresight*? That *the human mind can truly exert an influence over things and conditions* was not a credulous belief of the ancients, but a known and demonstrable fact to them. That there exists a wealth of infinite knowledge just beyond the border of our daily thoughts, which can be aroused and commanded at will, was not a fantasy of those ages of antiquity, but a dependable aid to which they turned in time of need.

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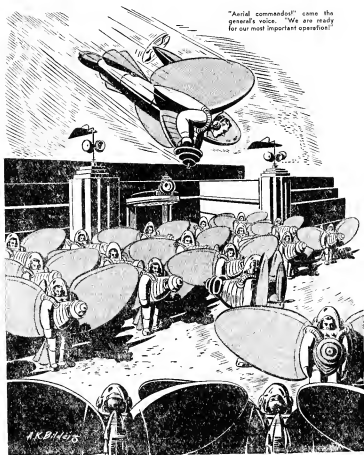
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A PATRIOT

"Aerial command!" come the general's voice. "We are ready for our most important operation!"



NEVER DIES

By FRANK PATTON

GIVE it to 'em, Joel!" Conny Martin yelled. "You got 'em in range!"

The muffled purr of the silenced hi-ex atomic bullets was sweet music in Martin's ears as he bent his tensed body over the vibrating machine gun and fed a seemingly endless belt of cartridges into its maw. The darkness of the little hollow in which they had set up their weapon was red now with the flash of the bullet-stream coming from the gun muzzle. Twelve shots a second were causing that red light; twelve bullets with enough atomic hi-ex in each of them to blow a two-hundred tonner to bits.

"You bet!" came Joe Jason's voice, vibrating a bit because his body was vibrating in tune with the gun he was firing. "Those blasted Japs will wish . . . umh—"

Abruptly his voice ceased. The gun stopped firing. Martin half-turned,

thought he heard a body flop in the snow, then suddenly the gun was firing again. But Martin remained turned in a frozen attitude as he stared at something fluttering just on the rim of the area lighted by the red glare from the gun.

Off in the distance, four miles across the valley, behind him, a tremendous thundering was coming to his ears. A tremendous thundering that came because the whole valley-side was erupting under the burst of hundreds of bullets that exploded with all the vehemence of 16-inch naval shells. Jap land battleships were flying to bits over there. The light of the explosions revealed their shattered giant hulks, leaping into the air for hundreds of feet as they disintegrated. But Martin wasn't looking that way. He was staring at that waving thing behind them . . .

"A flag!" said Conny Martin, his voice queerly constricted. "An Ameri-

Like a ghost he came onto the battlefield. But no ghost fought as this man did! Who—or what—was he?



can flag! What the hell is a flag bearer doing here, and at night!"

Dimly Martin made out the forms of men, dim forms in the backness, charging past him, streaming into the darkness behind the flag.

Even when it was gone, the flag remained in Martin's vision like a retinal memory. Remained there because of something very strange about the star-field.

"*Thirteen stars, in a circle!*" Martin choked out. "Hey, Joe, a flag just went by. It had . . ."

The machine gun had stopped purring now, and the red glow had vanished. The terrific hell that was bursting across the valley stopped too, but the red flames over there didn't. Eighteen giant Jap land battleships lay in fiercely burning wreckage all up and down that fatal slope.

But once again Conny Martin wasn't looking in that direction. He was staring at the man behind the gun.

No weird, range-finder-helmeted figure this! No gas-mask-hidden face! No warm-uniform-clad soldier! This wasn't Joe Jason!

Instead, the man whose intent eyes peered over the weapon his fingers still clutched to his breast by the firing handles was dressed in a fantastic tri-cornered hat and a primitive belted jacket which might have made up a uniform, or it might have been a theatrical costume.

Conny Martin just stared.

"My God," he gasped finally, "who . . .?"

The man smiled oddly, looked across the valley at the destruction he had caused.

"Another life to give," he said in queerly triumphant tones. "And many more to take!"

He rose to his feet, seemingly oblivious of Martin's presence. He peered

into the gloom behind him now.

"I must go," he muttered. "There is so little time—and so much to do . . ."

Then as Conny Martin stared, he was gone, following the strange vision of the flag.

Martin's eyes dropped to the silent machine gun, saw beyond it a prone body.

"Joe!" he gasped.

He leaped forward, bent over the limp form. Then he straightened in horror.

There was a Jap bullet through Joe Jason's head. He was dead.

"NICE shooting, boy!" came a jubilant voice from behind him. "I saw the whole thing! You'll get the Distinguished Service Cross for this action, soldier!"

A figure scrambled down into the snowy hollow beside Conny Martin. Martin saw the captain's bars on his shoulders as he turned and lifted himself to his feet.

"You saw . . .?" he began, but was interrupted when the captain caught sight of the limp form in the snow behind the gun.

"Holy smoke!" the captain exclaimed. "Is he dead?"

"Yeah," mumbled Martin, still befuddled. "Never knew what hit him. But you said you saw . . .?"

"Do you mean to tell me you operated that gun like that all by yourself?" the captain demanded in incredulous tones. "Soldier, you sure covered yourself with glory! I saw the whole thing: eighteen Jap land battleships blown up! You know what you did, lad? You saved our whole right flank from encirclement. We'd have had to fall back to Pittsburgh."

"I didn't do it," Martin said hoarsely. "You said you saw . . ."

"Don't be so damned modest! Cer-

tainly I saw. Eighteen Jap . . ."

"I didn't do it!" insisted Martin. "Didn't you see the guy in the funny-looking hat and the jacket? Took Joe's place when he got hit and kept the gun going—And didn't you see the flag with the stars in a circle on it—?"

The captain looked at him queerly. The darkness of pre-dawn was being dispelled now by a gray morning light, and the officer's lean face was visible. There was a puzzled look on his features.

"You been hit, soldier? You're talking kinda funny."

"No, I . . ."

"You sure?"

Conny Martin shut his lips tight and looked at the captain. Then he turned and looked at the scuffed snow behind the gun—behind Joe Jason's huddled body. He took several steps forward—up over the rim of the hollow. The captain followed him, stared down too at the footprints that slogged over the rise, went on down the slope beyond and disappeared among the trees.

"Say, you *did* have help!" exclaimed the captain. "Who was he, soldier? He'll be up for a medal too."

Martin didn't answer at first. He was staring at the clean white snow beyond the hollow—the snow across which he had seen a group of men, one of whom was carrying a strange American flag. It was snow that was as smooth and untouched as the moment it had fallen. No sign of a footprint marred its surface. Martin felt the buckles on the back of his neck stand up. A queer chill chased up and down his spine.

"Who was he, soldier?" repeated the captain. "One of your buddies?"

Martin turned to face the captain. His eyes held a dazed look.

"No, Captain," he croaked. "I never saw him before. He . . . he wasn't

even a soldier! He . . ."

"A civilian!" the captain was incredulous. "How in the devil did a civilian get here? All civilians were evacuated weeks ago."

"Civilian?" Martin repeated the question stupidly. "Yeah, I guess he was a civilian. But he was dressed kinda funny. Like in a book I saw once . . ."

The captain nodded.

"We'll find him," he decided. "He'll be stopped before he goes far. And I guess the general won't be against pinning a medal on him, no matter how funny he's dressed. In fact, if I don't miss my guess, he'll be in uniform before you can say Jack Robinson."

"Come on, soldier. Let's pick up that gun and get back to the lines. It's still risky as hell out here—even if it'll be a while before the Japs try anything else!" He chuckled, slogged back through the deep snow to the gun. Conny Martin followed silently, his face a frown of puzzlement and wonder.

"TELL me the whole story, Private Martin," said the general.

"Yes, sir." Conny Martin hesitated a bit, wet his lips. "I guess I'd better go back to midnight, when we went out to our post—Private Joe Jason and I. We were supposed to set our gun up on the hill, bidden in the trees, to cover the slope. But Joe figured if we went down a ways into a little hollow that led to a ledge overlooking the whole valley, we'd be in an advance position, and if the enemy did start an attack, we could blast him before he got below the valley rim . . ."

The general interrupted. "You mean you set up an advance post in no-man's land, beyond the cover of your flanks?"

"Yes, sir," said Martin bumbly. "We figured to withdraw to the hill just be-

fore dawn. The enemy couldn't see us in the dark and we couldn't see them. Not from the hilltop. We figured by getting closer, we would be able to spot any enemy tanks if they ventured out of the trees onto the white snow on the opposite slope. It was darker than our commanding officer told us it would be, and we were almost useless where we were told to set up station."

"Very good," commented the general. "Thinking soldiers. That's why those yellow bastards haven't driven us into the Atlantic!"

Martin went on:

"Well, at about 4:20 ack emma we spotted a Jap land battleship sneaking out of the black of the trees across the valley. We held our fire to let it come into more certain range, and discovered that it was a full-scale attack, and not just a sortie. We counted twelve big ones before we realized what was happening.

"The Japs had the range figured, and they knew our gunners, even if they spotted them sooner or later, would be out of effective range and by the time the alarm was sounded, they could cover the ridge with high explosive and then follow on over with no opposition. The only thing they didn't know was that one of our crews would come right down into the valley and wait for 'em.

"We held fire until we were sure the whole Jap force was in range, and that no more of the big habies would follow. We knew the infantry would be ready behind, but we weren't worried about them. They'd never make it up our side of the slope with our boys in action at the top.

"We opened fire, and then . . ." Conny Martin hesitated, and an embarrassed look spread over his face. "We got 'em, sir," he finished hurriedly. "Joe took a bullet in the head, and first

thing I knew, a civilian was at the gun, helping me. He finished the job, sir, then beat it."

Martin was silent.

THE general glared at him.

"Martin, you're covering something. Do you mean to stand there and tell me a civilian just popped out of nowhere and manned that gun, then beat it and you didn't even try to stop him, or find out who he was?"

The captain spoke up.

"You mentioned something about a flag, Martin. A flag with stars in a circle . . ."

Martin swallowed hard.

"I musta been seeing things, sir. There couldn't have been no flag. Besides, we both looked, and there wasn't any footprints in the snow. I saw a bunch of men following the flag too. It was like a dream. I musta got a shot of radiations from the gun, or something. . . ."

The general regarded Martin with a frown, then his face smoothed out.

"Martin," he said, rising to his feet, "you're a fine soldier. First, you and your companion showed brilliant common sense in advancing your post when observation was impossible. You saved us from a crushing attack. Next, you showed extreme tactful sense in ascertaining the full strength of the enemy and holding fire until he was trapped. Finally, you showed plenty of guts finishing the job, no matter who helped you, even when you were suffering hallucinations. We've had gunners get a shot of radiations before, and it's had business. Befuddles some of them so much they are likely as not to fire on their own men.

"I'm putting you up for a citation, Martin. The President will hear of this action. And I wouldn't be surprised if it meant a promotion. . . ."

"Sir!" Martin shot the word from his lips with an embarrassing emphasis.

"Eh?"

"Sir," Martin repeated, in lowered tones, face flushing. "If you don't mind, sir, I'd rather not have a promotion. I'd like a transfer."

The general's face darkened.

"A transfer? You mean to another command? I don't get it, Martin . . ."

"No, sir! I want a berth in the Commando Division, your own pet command. It's the best spot in this man's whole army!"

The general's eyes lighted. He looked pleased.

"Son," he said warmly, stepping forward and clasping Martin's hand in his own. "If that Division wasn't strictly a volunteer group, I'd have asked you to join it. You can count on it, lad."

"Thanks, sir!" said Martin. "Thanks!"

AN ORDERLY popped into the tent, spoke in a low voice to the captain.

The captain turned to the general.

"Sir," he said. "Our outposts picked up a civilian just beyond the lines. It seems he killed two Jap infantrymen in a hand-to-hand encounter when our boys came to the rescue. He's outside now!"

The general's face lighted up.

"Bring him in! It looks as if we've got our man! And still out there killing Japs! My God . . ."

Conny Martin wheeled to face the flap of the tent, an unexplainable tightness at the back of his neck, and a crawling sensation up and down his spine. In his mind's eye, he pictured again the ghostly flag fluttering in the light from the machine gun; saw once more the silent forms following it into the darkness. He'd seen them, he was sure of that, and yet there had been no

marks in the snow . . .

The tent flap opened once more, and a soldier with a gun at the ready motioned an erect form ahead of him. The man entered. The soldier remained outside at a signal from the captain.

Martin stared.

"That's him!" he said in a tense voice. "He's the guy who took Joe Jason's place at the gun."

The general spoke:

"Who are you?"

The man removed his queer tri-cornered hat, held it respectfully in his hands. His leather jacket was open at the neck, and he should have been cold. But if it was true, he ignored the fact. He was covered with snow, and there was blood on one sleeve. He wore rough, heavy shoes that seemed hand-made. He wore heavy, knitted woolen socks into which his trouser legs were stuffed, making ridiculous hulges around his calves.

"My name is . . . John Smith," he said.

"Where do you come from?"

"Boston."

"Boston? That's a long way from here. How'd you get here?"

John Smith shrugged, smiled.

"I walked."

The general snorted.

"That's just fantastic enough to be true," he said. "More damn people asleep at their posts . . . But what are you doing here—and did you assist this soldier in operating the gun that wiped out that Jap attacking force?"

Smith nodded.

"To the first question, I came here because I was needed, and because I wanted to do something to help my country. I wanted to do more than I was able to do . . . so far. To the second question, yes. I very fortunately arrived on the scene when I was needed, so I lent a helping hand."

"WHERE in the hell did you go then?" exploded the general. "Don't you know you've been running around in no-man's land? It's a mystery to me why you weren't blasted a hundred times by snipers. It's suicide out there in daylight."

"I'm not dead, General," said the civilian with a grin. "And a few of the enemy are; although . . ." he frowned . . . "I do admit they fight in an exceedingly strange manner. They almost overcame me by surprise. I am not used to the weapons they use. As to why I went, it was for information. On the way here, I saw signs of an enemy concentration of supplies. I merely went to confirm it."

The general stared. His voice came with queer intensity.

"And did you?"

John Smith nodded.

"Yes, sir," he said. "I did. And I believe that by a bold attack we could acquire those supplies, which might be needful."

"Needful!" the general exclaimed. "Damn right we need 'em!" If we don't get food and medical supplies soon, we'll be sunk! Where's this supply dump?"

"Just over the ridge on the other side of the valley. And if I can request the honor, sir, I would like to don the uniform of your army, sir, and fight under you for our country. I have waited long for this chance . . ."

"Waited long?" said the general in puzzlement. "Couldn't you have joined up in Boston?"

"There is little action where I come from," said Smith quietly. "I wouldn't say I came exactly from Boston, sir. Nearby. And I don't think I have the time to go through a training period."

"Good enough," grunted the general. "Lord knows I need soldiers. You'll get your uniform, and if I'm not mis-

taken, there'll be a medal to pin on it . . ."

"Oh, by the way, General," said Smith, "I'd like to be attached to the special division with Mr. Martin here. I've fought with him already, you know, and I'm sure we'll get along well."

"Certainly, certainly!" said the general genially. "Now get to the Officer of Supply and get your equipment. Then we're going to make plans for a commando raid on that supply dump!"

Conny Martin followed the captain and the mysterious civilian, John Smith, out of the tent. As he walked, he stared at the man's broad back.

"How did he know my name?" he whispered to himself. "And how did he know I was going to be one of the Commando Division?"

Once again the hair on the back of his neck rose.

John Smith *couldn't* have known, and yet—he *had*!

CHAPTER II

Aerial Commando Raid

"TRULY, a marvelous mechanism," said John Smith. "What did you say it was called?"

Conny Martin stared at his newly-commando-uniformed companion in incredulous exasperation.

"You mean to say you never heard of the bee-wing before? Good Lord, man, even Boston can't be that backward! Why a dozen books have been written about the exploits of the bee-wing commandos!"

John Smith looked apologetic.

"I don't come from Boston, exactly," he said. "I come from . . ."

"I know," supplied Conny Martin. "You said that yesterday; in the general's tent. But I don't get it at all. You couldn't possibly know anything

about the war and not know what a bee-wing is."

"My ignorance is unforgivable," said Smith. "But if you will, please explain it to me. You know, you are to teach me its use so that we can accomplish our raid on the supply base."

Martin looked down at the fantastically human-looking machine on the ground before them. Human-like, it appeared in the sense that a diving suit looks human. But bee-like it looked, because of the peculiar wings that were attached to it where the shoulders joined the helmet, which was of transparent plastic. These wings were reproductions in metal of a bee's wings. They were geared up with the drive shaft of a compact little atomic motor, and also geared to a tiny helicopter-like propellor. In the rear, at the portion where a bee's sting would be located, was a streamlined tail complete with rudder and ailerons, and tiny rocket tubes.

"This suit," Martin said with an explanatory frown, "is a bee-wing commando suit. In it, a man becomes a bee—if I can be so literal—and stings like a bee. Not with the tail of course, but with weapons that are as potent as the armament of the old-time dive bombers and Lightning fighter planes. In destructive power, they might be likened to the navy's mosquito boats.

"The motive power of this flying suit is in the atomic motor on the back. It provides the energy which allows the operator to perfectly control his movements in all directions. He can rise vertically or horizontally, hover in mid-air, dart forward with the speed of a rocket, dive with terrific speed and accuracy, or perform a series of maneuvers that would put a bee to shame . . ."

"I've watched the bees," put in Smith enthusiastically. "I can easily see

where this machine would be a terrible weapon. Imagine traveling through the air with all the ability of a bee!"

Martin stared again at his strange companion. Once more the peculiar chill of something unknown coursed up and down his back.

"Why do you know so little of things that everybody knows about?" he asked.

JOHAN SMITH looked at Martin squarely.

"You deserve an explanation," he admitted. "The fact is, I have been . . . imprisoned. For many years. In fact, for so long that I have had no idea of what was going on. Not until I was . . . released . . . did I know what great danger faced my country. I knew nothing of things as they are in this day, but I did know that my country's armies were fighting a strange and terrible enemy. Given another chance, I came straight to the place I was needed, the fighting front. I know you are curious, but I see no sense in telling you things that you will not, or cannot believe. Suffice it to know that I was held impotent in a place that is far from here—and from Boston—and that I have been released at my request, to fight again for my country. I am an American, Martin, and I would be proud to give my life in defense of my country. My only regret is that it is so little to give . . ."

Abruptly John Smith stopped speaking, turned toward the bee-wings.

"Come, let us get at the task of teaching me to fly in this thing. We must hurry. Now is the time to strike a blow for our independence . . ."

Martin stepped forward, climbed into his bee-wing, and in a few moments stood awkwardly inside it. His voice came to Smith's ears over the inter-communicator set.

"Close all the openings with the zippers as I have done . . ."

Martin watched with a frown as Smith struggled with the plastic zipper-fastened suit, stepped forward and helped him make them secure.

Smith smiled apologetically.

"Very clever gadgets indeed," he said.

Martin pointed to the studs on the belt and chest of the suit. He indicated one.

"Turn it. It'll give you oxygen. This suit is gas-proof. There, now turn this other one. It'll start the motor."

He turned the knob on his own suit, and the motor began to hum almost inaudibly. At his instructions, Smith turned other knobs, and they rose slowly into the air, in a vertical rise that carried them above the trees.

"Not too high," warned Martin. "We don't want the enemy to see us. The smoke screen is out, of course, but they may be able to penetrate it higher up . . ."

FOR the next two hours, John Smith operated his bee-wing suit under the watchful guidance of Conny Martin; and at the end of that time, Martin's voice broke on his eardrums.

"Smith, if I ever see a man learn to fly a bee-wing faster and more expertly than you I won't believe my eyes. And for a guy who says he never even heard of one before . . ."

"But come on, let's get back to camp; it's getting dark. And we'll be taking off early, before dawn, for the raid. I guess you know more than I do now, about operating these things. I don't know how you do it . . ."

"You are an excellent teacher," said Smith.

Inside his bee-wing, as they soared back to camp, Martin drew his brows

into a doubtful frown.

"That's not the truth," he muttered to himself. "Either he's a genius, or a liar . . ." Martin's thoughts came to a dead stop, and his throat tightened. ". . . or a liar," he repeated. Into his eyes came the light of suspicion, and into his mind came worried fear.

"What if . . .?" he began to whisper to himself. Suddenly he clamped his lips tightly together. Conny Martin, soldier, would keep his eyes open, and keep on guard. If his suspicions were true, here was one man who wasn't going to be caught napping!

IN THE cold light of the winter dawn, the commando unit presented the appearance of a group of visitors from another world. So fantastic were they that even Conny Martin, standing in his place in the company, stared about him with awe and with a strange thrill coursing through his body.

There seemed nothing human about the line of men standing at attention in the eerie light. They looked more like monster insects out of a madman's dream. Huge, fearsome creatures with wings and poised stingers. Transparent plastic helmets seemed not helmets, but casings that held, horribly, human heads. Squat, swollen legs, segmented like those of insects, held each commando erect. Weapons and controls on the bee-wing suits provided fantastic, menacing mystery that set them aside from true chitin-armored insects. No insect ever had the appendages that these suits had!

Martin knew the power of these weapons. Each suit was armed with a tiny built-in replica of the machine gun which he had been servicing when the Jap land battleship armada had been destroyed. Perhaps one-tenth the size of that weapon, this little rapid-fire gun was the equivalent of a five-inch

naval gun. Its minute shells were as potent as those of a heavy field-piece, and the rapidity with which they left the muzzle made their destructive power that of a minor inferno.

These bullets, contained in tiny belts mounted somewhere in the bulky suit, were the size of twenty-calibre derringer bullets of the ancient days. And the suit's capacity was several thousand shells.

Attached to the shoulder of the suit was a powerful concealed sling operated by compressed air, which would be withdrawn and extended along the metal arm, for aiming purposes. This sling hurled grenades which destroyed everything in the area of a city block, like the block-buster bombs that the British night bombers used in the conquest of Nazi Germany and its satellites, years before.

Built into each suit was a two-way radio communicator, an oxygen and purifier apparatus, and a heating unit.

Martin knew what these suits could do. They could carry their operator to heights of fifty-thousand feet and more. They had a top speed of four-hundred miles per hour. Their compact atomic motors provided enough power, and enough fuel was available, to travel as much as three thousand miles and return.*

* On May 18th, 1953, the most famous of all bee-wing commando raids took place. American commandos, raiding from their base in Chicago, before the Japs took that city by aerial storm from Alaska, took off in force, and made a non-stop flight to San Francisco and in a four-hour attack, completely wiped out that enemy base. In the stupendous destruction, almost the whole Jap Pacific naval fleet stationed on this side of the Pacific was destroyed, caught napping. One-hundred-nineteen enemy ships, mostly battleships, cruisers and light cruisers were sunk. Ten enemy armored divisions were wiped out, and the attack that might have carried America to destruction was forestalled for many months. These months were used by America to prepare a Rocky Mountain defense that slowed up the Japs until the bat-

OVERHEAD now a single bee-wing flashed, its wings beating in a blur as the occupant caused it to hover over the line of men drawn up in tense waiting.

"Ready, men," came the metallic voice in Martin's ears. "Prepare to take-off. Follow my guide light through the fog-screen, and be prepared for action. Ground troops will attack just before we arrive, and destroy the ray-screen. Naturally, the secondary screens will come on, but the energizing units will be clearly visible to all of you through the electronic scanner. Before the screen can build up, destroy the energizers! When that is done, follow your leader. Our objective is a supply dump located just beyond the ridge. *We don't want to destroy that dump!*"

The voice coming from the hovering bee-wing paused for a moment and then went on.

"Destroy its defenses, and the garrison as quickly and efficiently as possible, taking care not to destroy the supplies and munitions. Then proceed westward, to take up a defense ring around the dump while our supply tanks move in, load the captured material, and return to our lines. We need those supplies, men! If we get them, it will stop the enemy in his tracks, and give us what we need for a counter-

the of Denver. America, however, paid a heavy price for its surprise commando raid with the new bee-wings. Almost to a man the raiders were shot down, and the secret of the bee-wing fell into the Jap hands. Only because the Americans were the inventors, and knew more about atomic power than the Japs, were they able to keep ahead of the Japs in bee-wing science. It was the bee-wing, converted from commando use to regular army divisions, panzer units of the skies, that saved the day after the disaster of Chicago, and finally held the Japs at bay west of Pittsburgh. It was on the Pittsburgh front that Conny Martin and Joe Jason, aided by the mysterious John Smith, broke up the initial spearhead of attack of the Jap final push. What happened in the ensuing weeks is history.—Ed.

attack that is aimed . . . well, boys, we're going to push 'em into the Pacific, aren't we?"

The last sentence, in the calm voice of the hovering bee-wing's occupant whom Martin now recognized with a start was that of the general himself, was not a question, but a simple statement of fact. It was met by ringing cheers from the assembled commandos. Martin himself joined in. *There* was a fighting man! No back-seat driving in this army!

"You bet we'll follow you!" said Martin softly to himself. And at the same time his eyes took in the second bee-wing that now rose to take its place beside the general. It was the mysterious John Smith.

"And I'll watch you, too!" Martin swore. "There's something about that guy . . ." Once again the unaccountable chill coursed down Conny Martin's spine. His face drew up in a worried cast. "How can a guy you like so much make you feel like this?" he asked himself. "It's just that there's no explanation of where he comes from, why he's here, and how he got here . . ."

THE command came now to take-off, and Conny Martin forgot his suspicions for the moment in his concentration on getting into formation above the camp.

A few minutes later, he pressed the stud that sent his bee-wing racing forward just behind the general and the bee-wing of John Smith.

They entered the fog-screen, and the wavering, eerie blue light of the fog-penetrating beam carried by the general spread its glow in an unmistakable beacon.* They plunged on, and Martin saw his ray-indicator begin to glow

on his instrument panel. They were nearing the enemy ray-screen.

The pace slowed as the general hesitated . . .

Then hell broke loose below. Charging land-battleships painted with the American Star became visible in the dawn. Their guns flashed. The roar of exploding shells came to Martin's ears even through the insulation of his bee-wing suit. Great eruptions of flame came up ahead, just at the crest of the ridge.

Abruptly the tiny glow of the indicator on his panel faltered, then died.

"Charge!" came the general's voice in his ears.

Martin sent the bee-wing forward at flashing speed, saw ahead of him the wavering orange glow that indicated the enemy secondary ray was being brought into being. That took an interval of time, before the ionized carrier beam could be built up to carry the lethal rays. It was necessary to break down the atmospheric resistance first, and it was this resistance that caused the orange glow.

Martin saw one of the fanning beams spreading up from a point on the ground just ahead, and dove for it at top speed. He sighted through his range-finder, and in seconds, got his bearing. He pressed the firing button of his weapon. The bee-wing jolted horribly, at high speed, and Martin almost blacked out under the buffeting of conflicting forces. But ahead of him a crimson light spread, and a stream of hi-ex atomic bullets went straight from the muzzle of his weapon to the base of the spreading orange fan.

There was a terrific burst of brilliant light. The base of the orange fan erupted into a hell of exploding atoms. Martin ceased his fire, and sent his bee-wing up into a screaming zoom, to carry him out of his dive at the target,

* Invisible to the enemy, because only specially treated glasses worn by the commandos made it visible to the ordinary eye's spectrum-range.—Ed

and to the comparative safety of the upper-air.

There, from his vantage point, he saw that others of the commandos had followed his lead, and all over the place, orange beams were vanishing in an erupting hell of explosions. Not one remained.

AHEAD, the blue beacon of the general's bee-wing became a blinding violet glow that extended for hundreds of feet. Martin dove for it, fell into formation with the rest of the bee-wings, and shot forward toward the enemy supply dump, now clearly visible in the dawn. They were over it then, and hell broke loose!

Martin could hardly remember how he fought, but his one aim was to destroy the installations to which his particular unit was attached, and then return to the general's beacon and to John Smith.

Shells exploded all about him, and for a moment, from the intensity of the fire, Martin thought that the commandos had been led into a trap. But almost miraculously, the fire died down, then ceased altogether. Down below, a bee-wing was darting about with fantastic speed, and where it paused, an enemy gun emplacement went up in flaming hell. Gun after gun was replaced by a smoking crater as the bee-wing darted about. It was joined now by other bee-wings, and in a startlingly short time, the thunder of action was replaced by silence.

Smoke hung in a pall over the scene, and here and there crippled enemy soldiers tried to crawl away. Systematically bee-wing commandos picked off everything that moved. Radio installations were wiped out upon identification.

"Take up defense positions!" a voice rang in Martin's ears.

Startled, Martin looked down. That voice had been the voice of John Smith!

He dove down swiftly. The general's blue light had vanished.

Martin brought his bee-wing close to a bee-wing which stood on the ground. Beside it was another. It was that of the general!

"Help me, Martin," came John Smith's relieved voice. "The general's been hit. He's wounded."

Stunned, Martin recognized the bee-wing of John Smith as the one which had been so destructive to enemy installations.

"Sure thing!" he gasped, alighting beside Smith. "Is he hurt bad?"

The general's weak voice came to his ears.

"Get to the defense, lad. I'm all right. Just winged me, and put my radio out of commission. I had to have Smith, here, give the orders. Only my local communicator works . . ." The general's voice ended in a gasp of pain, then resumed.

"Get going, you two. The supply tanks will pick me up . . ."

Smith looked at Martin and nodded.

"We've got to," he said. "This means everything to our cause . . ."

SMITH'S bee-wing darted up, and Martin leaped in pursuit. Deep inside him, suspicion still lurked. Now that the general was wounded, he had to keep an eye on Smith.

"There's one thing I don't get about all this," he muttered to himself. "How in hell could Smith have spotted this dump in the few hours between the time he helped me fire the gun in the hollow, and the time he was rescued in the valley from those Jap infantrymen? It's twenty miles to this dump, and nobody, not even a civilian on foot, could have gotten through the ray-screens . . ."

Yes, beyond all doubt, there was something about John Smith that wasn't as simple as he claimed to be.

Grimly Martin soared off behind John Smith, to take up his defense station alongside the man who had come out of nowhere to fight like no other man, and yet who inspired such lurking distrust. It wasn't his actions, but the mystery that surrounded him that put to naught all his incredible deeds. For what purpose . . . ?

Surprised at the question in his mind, Martin traced it back to a cryptic statement John Smith had made . . . Something about . . .

Released! That was it! *Who* had released him? Obviously not Americans, because there would be no reason for Americans to hold an American—if he was loyal. And if he was not, no reason to release him. Therefore, it must have been the enemy who released him!

"And the Japs don't release *anybody* without a damn good reason!" breathed Martin.

"What did you say, Martin?" came John Smith's voice in his inter-communicator? "Did you say something about Japs?"

"Yes!" shouted Martin, pointing ahead. "I said, here they come!"

CHAPTER III

Trapped

THE rising sun was behind Martin and Smith, and they must have been invisible to the score of Japs in flying suits darting forward over the ridge, intent on attacking the giant land transport tanks now engaged in loading up captured enemy supplies in the supply dump. They had come, with characteristic Jap deceptiveness, through a gap in the defense lines that had been caused

by the two American's delay in getting to positions.

Beside Martin, John Smith didn't answer, but instead, his flying suit darted forward, outstripping his companion who acted a split second later in getting into battle motion.

The enemy was clearly visible over the ridge-top against the pinkish clouds that were now brilliantly lit by sunlight from the east. They were perfect targets, and a thrill of exultance went through Martin as he realized the opportunity that had offered itself. The Japs, thinking they had slipped through the defense ring, were now abandoning caution and leaping to the attack.

John Smith opened fire before Martin. Almost as quickly as the eye could wink, three Japs exploded with terrific concussions in a group at the right of the advancing formation. The explosions blew two more Japs aside so violently that they lost control. At this low elevation it was fatal. They dove into the ground at six hundred miles an hour and completely buried themselves beneath the white snow. Martin pictured, for a fraction of a second, their bodies crushed to a pulp against the frozen, rock-like earth beneath that snow . . .

His own suit was bucking now as his gun opened up, and he picked the left side of the startled Jap attacking formation. His results were not quite as good. Two Japs exploded, and two more shot straight toward the zenith, warned by the fate of their fellows. One of them exploded before he had attained a height of a mile, and Martin realized with incredulous surprise that Smith had picked him off with a lightning shot.

Martin sent a spray of bullets after the other ascending Jap and had the satisfaction of seeing him dissolve in a brilliant red puff there in the blue. Japs

at altitude were dangerous, because they could dive down, spraying bullets in a cone that covered an area of many acres. Anyone caught below such a cone was almost a sure casualty.

Martin swung his suit around in a spiral, swirling his fire in a huge sweep toward the center of the Jap formation, and Japs burst into flaming brilliance one after the other like toy soldiers going down in a row. Abruptly from above a cone of fire came down, wiping out the balance of the Jap salient to the right. Up above, Martin saw Smith's suit zooming down in a dive, and he watched in wonderment as the fellow came out of it and shot over toward the spot where he now waited.

"GOT them all," said Smith in jubilation. "That was nice work, Martin."

"Nice work!" gasped Martin. "You complimenting me? How in the devil do you get up there so quick for a dive?"

"You gave me the opportunity. Your sweeping attack from behind—how did you get behind them so fast!—drew their attention, and I took advantage of it to loop up through the smoke of that fellow I caught going up. Besides, if I'd stayed where I was, you'd have completed that sweep and picked off *all* the Japs, and myself included!"

Martin grinned to himself.

"That would have been my fault in a number of ways," he said. "Poor time to be telling you, but the tactic on a maneuver of this kind is to sweep around both ends of a formation, firing inward, and to meet again directly behind. Thus both of us are safe from the other's fire, and we sweep the whole 360 degree arc of space occupied by the enemy. But you needn't have worried. I would have stopped at 180 degrees."

"That's a great idea, Martin," said

Smith seriously. "I can see there is much you can teach me about this kind of fighting . . ."

"You don't need much teaching," said Martin drily. "That maneuver of yours is a new one in the books. And it worked like a miracle. Obviously the Japs lost you, expecting you to come around as I did."

They were at the top of the ridge now, and in formation. Ahead of them stretched the Jap rear lines, and here and there encampments, gun placements, and camouflaged areas were obvious to Martin's trained eyes.

Behind them, agile mechanical scoops were finishing the job of loading the Jap supplies into the great transport tanks, and already many of them were lumbering over the ridge on the other side on the return trip to the American lines.

"We've done it," said Martin quietly. "Those supplies are ours. But that little skirmish we just had is going to seem like a picnic in a few minutes. The Japs are launching a full-scale attack! We'd better . . ."

Smith's voice rang loudly in Martin's startled ears as it came from the command communicator.

"Up, men!" he shouted. "As high as you can go. The tanks are on their way back, and that job is done. But now we've got to stop this attack, or they'll cross the ridge and put all our work to naught. Everybody up, and be ready to dive with guns set for cone-spray when I give the signal. The general has been injured and he has given me command . . ."

Martin gasped. The audacity of the man! Once more, in spite of what he had seen this stranger do, suspicion rose in Martin's mind.

Another voice broke in on the communicator.

"Do as he says, men," came a weak

voice. It was the general's voice! "He has my instructions. Stop the Jap attack, boys, or it'll mean . . ." The general's voice died away in a low moan. The communicator was silent for a second, then:

"Up, men!" came Smith's urging voice. "Here they come!"

LIKE magic, across the terrain ahead camouflage was disappearing, and in its place numerous Jap tanks, planes, aerial infantry divisions came into view. The Japs were advancing in full force.

Overhead, Jap observers were obviously giving the signals for the advance. Martin realized suddenly that these observers were basing their instructions solely on the retreating land battleships and transport tanks in the valley behind. They thought the whole American force was retreating!

"Smith!" said Martin swiftly. "There are Jap observers upstairs! They can't see us. Obviously they don't know we exist. But if they do spot us—"

"All alert!" called Smith. "Every man watch above him for Jap observers. When sighted, fire instantly! They must not detect us . . ."

Martin grinned suddenly.

"Just what I was about to say," he whispered to himself. "What the hell am I suspicious of this guy for?"

He scanned the heavens above him, and almost instantly saw a black speck in the blue. He drew a careful bead on it, but suddenly it dissolved in a bright orange flash. Chagrined, he looked over at Smith's suit, and saw the man toss him a grin. In that moment his suspicions vanished completely.

"Whoever you are, and wherever you come from," muttered Martin, "from now on, you're okay with me!"

Several more orange puffs above denoted other Jap observers being

checked off by the rising and invisible—from the air—American commandos.

"Looks like we got them all," said Martin.

Off to his left, one of the Americans exploded violently. The concussion rocked Martin, and he took several seconds getting under control again.

"They've sighted us from the ground, men!" shouted Smith. "Dive to the attack! We don't have more than a few minutes now before they fill this area with flak!"

Martin sent his suit in a screeching dive toward the ground, at the same time opening up with his guns, spraying the powerful hi-ex atomic bullets in a sweeping cone of destruction below him.

"Give them everything you've got, men," came Smith's calm voice. "We've got time for only one dive. Then, run for our own lines. Your final instructions are to reach safety if at all possible. That is all."

A cheer broke from the communicator—a cheer from the men of the command—and Martin found himself joining in. But a moment later he was too busy to pay any more attention to the others.

HE LOOSED his bombs one after the other, placing them carefully spaced in the conic area just below him. He knew that others of the commandos were doing the same, and the result in a moment more would be a vast sea of flame engulfing the whole area of perhaps twenty square miles directly below the attackers.

A thrill of exultance was choking Martin's heart up into his throat as he stared down at the rapidly nearing ground and realized that the area that would vomit into an inferno in a few seconds covered the entire Jap attacking force! It would be a massacre!

"And all because of a man from nowhere!" breathed Martin. "How could I have ever distrusted him? I don't care now if he came from *hell* . . .

In spite of himself, Martin felt a chill course up and down his spine. Once more that nameless eerie feeling swept over him, and he swallowed hard.

"John Smith!" he whispered. "What are you?"

Abruptly a sea of red spread out below, and Martin found himself blinded by the holocaust. Hurriedly he loosed every remaining bit of ammunition in his belts, set his guns to fire till empty straight toward the ground no matter what his own position, then streaked toward the east and home with the full speed of his suit. He had only time to check his altitude indicator and realized with a thrill of horror that he was too low to clear the ridge toward which he was rushing before destruction beat against him in a terrible wave as the earth below erupted to the smashing charges of more hi-ex atomic fury than had ever been loosed in one single area before.

Blackness swept in upon Martin, in spite of the insulation and shock absorbers of his flying suit, he felt himself hurtling upward like a cork in a tossing sea. He spun around violently for many minutes, while destruction reigned below. Eventually Martin's suit automatically righted itself, shot off toward the horizon once more. After a few moments he regained consciousness and when he realized where he was, discovered that he was hurtling deep into enemy lines. At the same time, his helicopter blades faltered, and he began to lose altitude.

"Damn!" he said. "This will never do."

But in a few more minutes he found that it *had* to do. If he continued on, the helicopter would fail altogether, and

he would plunge to his death.

He sent the suit down in a steep glide, nursing the helicopter along, aiming for a clump of trees on a slope not far away. He came nearer to them watching closely for signs of enemy occupation. There were none. The trees were only trees, and no camouflage was visible.

Satisfied, Martin leveled off, sank down. Eight feet from the ground the helicopter failed, and he dropped prone. For an instant he lay, dazed by the shock, then scrambled to his feet.

Ringed around him were a dozen Jap infantrymen, weapons leveled.

CHAPTER IV

Prisoner of the Japs

IT WAS cold in the barbed wire enclosure that surrounded Martin. He was in a Jap prison camp. All about him were the huddled figures of other prisoners. Most of them looked half dead; several of them *were* dead—frozen stiff. Their bodies had been covered with mounds of snow by their fellow prisoners.

"Those blasted Japs never bury them," said a listless man when Martin asked him. "We have to bury them right here in the enclosure—when the ground is soft enough."

"How long have you been here?" asked Martin.

"About a month. But nobody's been in here over two months."

"Why?"

"Because if you don't die before that—you usually do—they just quit feeding you. The Japs don't keep prisoners long—just enough to get what information they can out of them."

"They get much?"

"Sometimes. They have some mighty effective tortures." The man beld up his hands, and Martin saw with

horror that his fingernails had been torn out. The stumps of his fingers were frozen, and they looked green. "I gave them information," finished the prisoner.

Martin looked at the man steadily. He looked back just as steadily.

"They don't know it isn't true," he said to Martin. "And by the time they find out, I'll be dead. Meanwhile they aren't torturing me any more."

The man's head dropped down and he huddled his body up in an effort to keep warm. He didn't speak again.

DAYS passed. Days in which Martin paced up and down inside the enclosure to keep warm, or huddled into the snow to sleep. Meagre rations, barely enough to keep alive, were tossed across the fence once a day. There was no scrambling for the food when it came; no competition for it. Instead the prisoners counted off, divided the food into equal piles according to the number of them still remaining alive, and each ate his share.

Several times prisoners were removed for questioning. Some of them did not come back. Those that did were carried in unconscious and dumped callously to the ground. Martin and others able to move about much, tended to the horrible mutilations of these unfortunates as best they could.

Martin wondered when they were going to come for him.

"Your turn will come," said a prisoner. "They really don't believe we can tell them much, and I think they only bring us out as the mood strikes them for sport. Torturing a man is sport to them."

More days passed, and Martin began to believe that he would simply be allowed to starve to death in the enclosure. Rations were being diminished as men died. There were about twenty

men in the enclosure now.

"Martin?" a harsh voice called his name, and Martin looked up. A Jap officer stood at the gate, waiting for him with a detail of men.

"Come out!"

Martin clambered to his feet stiffly, heating his arms across his chest to restore circulation. He walked slowly over to the gate, and a Jap guard opened it. The Jap officer was garbed in a greatcoat with a fur collar which came up about his face. He wore glasses. A fur cap on his head further concealed his features.

"March!" said the Jap in perfect English.

Martin marched. Guarded by the rifles of his escort, he walked through the snow toward a low hill. As he went along, he saw the dark opening of a dugout shored up by logs in its side. The path led up to the dark opening.

In a moment they were inside, and Martin found it pleasurable warm. They went through several doors, and finally emerged in a large room which was electrically lit. There was a table, several chairs. Behind the tables sat two officers.

The guards stayed outside, and only the officer who had fetched him entered the room with him. Martin stood stiffly erect, waiting. The officer who had brought him here removed his greatcoat, took off his fur cap, and stood revealed in his uniform. But it was with a shock of surprise that Martin saw he was a white man!

And further, he was none other than John Smith!

"**A**H," said John Smith. "I see you recognize me?"

Martin choked, looked at the others in the room uncomprehendingly for the moment, then, as he saw their grinning faces, realized the truth.

"You dirty spy!" he said, again facing John Smith.

Smith turned suavely to the Jap officers.

"I had the great pleasure of spending some time in this gentleman's company while in the enemy lines," he explained. "He was completely taken in by my disguise as an officer of the American army, and I may say, it was from him that I obtained most of the valuable information I have been enabled to pass on to you."

Martin stared.

"From me . . . ?" he began.

Smith went on as though Martin had not interrupted.

"I feel quite sure that we can learn much more from him. If I may suggest it, gentlemen, I would like to have a chance to get it out of him in my way before we resort to the—er—usual methods?"

One of the Jap officers looked thoughtful.

"I see no reason to deny your request, Captain Kruger," he said hesitantly. "However, I have found that these American prisoners are quite recalcitrant. They do not divulge information without—ah—persuasion."

"Perhaps this one is different," Smith hastened to say. "Remember, I have already received much information from him without—ah—persuasion. I think I can do it again. At least . . ."

The Jap officer waved a hand.

"Do with him what you will," he said. "When you are finished, bring him back to us, and we will extract anything he has neglected to tell you willingly!" He laughed sardonically, evilly.

John Smith, or as Martin now knew him, Captain Kruger, saluted sharply and wheeled to Martin.

"March!" he spat. "Outside!"

Martin's eyes glazed at Smith with cold fury before he turned, and blood boiling, stepped from the room. Outside, the guards sprang to attention, resumed their attitude of custody.

"Bring him to my quarters," commanded Smith. He walked off down the corridor.

As the Jap soldiers prodded him down the corridor, Martin's fury began to be replaced by bewilderment, and once again the eerie chills began to chase up and down his spine.

Captain Kruger . . . spy . . . got most of his information from Martin himself! What did all that gibberish mean? Obviously it was a lie. Smith had gotten no military information at all from Martin, back there in the American camp. Then why had he told the Jap officers that he had?

What did the name Kruger mean? Obviously he *was* a spy. The Japs recognized him as such, and apparently thought much of him, because they acceded to his request even though they felt it would be a fruitless procedure. And Smith *had* given them information which they deemed valuable in the past. Information that he had received in the American camp, even though he had *not* received it from Martin.

And what was his purpose now? He should know as well as anyone that Martin had no information that he, Smith, did not also have. Then what did it mean when he suggested to the Japs that he could persuade Martin to tell him still more?

MARTIN'S brain whirled with the confusion his thoughts produced. All this was getting too complex to comprehend. He gave up thinking about it, and returned to the more satisfactory mental exercise of building up his hate for the treacherous John Smith. But even that failed him as a strange vision

rose once more into his mind. That vision was the mental image of an American flag, with its red and white stripes, and its field of blue. The only incongruous part of the memory was the circle of stars on that field of blue. And he remembered too the motley army of men following that flag—an army that left no prints in the snow!

John Smith? Even the name was phoney! Captain Kruger? That certainly wasn't Japanese—no more than Smith himself, was Japanese. One thing about this strange man, though; he certainly switched uniforms with great facility—and often!

Martin was led now into a smaller room. He found John Smith sitting beside a small table. There was another chair against the wall. Smith dismissed the soldiers and pointed to the chair.

"Sit down, Martin," he said casually. He toyed with a pencil on the table, the while watching Martin with studied innocuousness.

Martin sat down, baffled. Smith got up, walked to the door, opened it, and peered into the corridor. Then with a grunt of satisfaction, he sat down again.

"Now, Martin, I'll try to explain . . ."

"It'd better be good!" Martin burst out angrily.

"First," said Smith, "I realize you don't understand a lot of things, and I must repeat, there are some things I can't tell you. But I've got to make you believe what I do tell you, because, frankly, I need your help."

Martin sat stonily silent.

"My name," said Smith, "is neither Smith nor Kruger. Captain Kruger is dead and buried. Buried where I killed him when I landed my wrecked commando suit after the blast that destroyed the Jap attacking force. Kruger was a Jap spy, a native of

Germany, who fled from his country after the Nazis were overthrown. He joined up with his country's previous allies, the Japs, and became a spy, going into the American lines as a civilian or as an American soldier. When I found him, he was changing from an American officer's uniform to a Jap uniform, and had uncovered a cached flying suit. He had on his person a wealth of detail about American forces.

"I was forced to kill Captain Kruger, because he tried to kill me. Otherwise, I might have thought he was an American. But he let loose a stream of German oaths—I understood German—and drew his gun. I shot him.

"When I had read the papers I found on him, I realized the opportunity that lay before me. Once before I was an American spy . . ."

"When?" asked Martin in surprise.

Smith ignored his question.

"I made certain changes in the papers of Captain Kruger, assumed his uniform, got into the flying suit, and made my way to the destination given in the papers. It was a destination to which Kruger bore a letter of identification and introduction, which I also altered to fit myself. Thus I knew I was not likely to be exposed through recognition.

"During the past few weeks I have been gathering information which I must get back to the American lines. That is why I need you."

Martin stared.

"I WILL have finished my work in a few days," Smith went on. "Then I will arrange for your escape. You will take the papers I will deliver to you, make your way out of here in a flying suit, and give them to your commanding officer. He will know what to do with them."

"Why can't you deliver them yourself?" asked Martin suspiciously.

Smith shook his head.

"That isn't possible. I have an obligation to fulfil . . ."

"What sort of an obligation?"

"That is one of the things that I can't tell you."

"Why?" Martin's voice was harsh.

"Because you would not believe."

"I don't believe a word you've already said."

Smith looked at him steadily.

"I know," he said. "But you will. I will give you sufficient proof. But meanwhile, you will take advantage of the opportunities I offer you. You will die, anyway, after much torture, in that concentration camp, so you have nothing to lose, except perhaps an advancement of your death by a few hours—if I have a trap in mind for you. And if not, you will have everything to gain . . ."

"I won't carry any phoney information from you to the American lines," said Martin grimly.

"I will prove to you that it is not phoney," said Smith calmly. "Prove it to you beyond all doubt. Then you can act as you believe right. Is it a bargain?"

Martin frowned.

"I don't get it," he said. "But what have I got to lose? If I don't think the information you give me is true, I won't deliver it, and that will be that. Yes, Smith, or Kruger, or whatever your name is, I'll do it."

Smith rose to his feet and extended a hand.

"Then that is that, as you say," he smiled. "Now I will return you to your prison camp. And to show you that I intend to keep my word, I'll see that you get sufficient food . . ."

"For twenty men," finished Martin.

"Yes. For twenty men!"

Martin hesitated a moment, then asked a question.

"Tell me, Smith, do you understand Japanese?"

Smith smiled.

"No. They didn't teach Japanese in the school I went to in Boston. I was lucky to be able to learn German—and that was only because old Professor Van Huyten knew it himself and so loved to teach it."

Martin bit his lip thoughtfully and turned to the door. Guards entered, obviously at some signal from Smith, and he accompanied them back to his prison. Once inside the barbed wire fence he sat down to think long and deeply.

CHAPTER V

A Visitor in the Night

A WEEK passed by that seemed almost an eternity to Martin. More and more in his mind the mystery of John Smith grew to towering proportions. He became more and more convinced that there was something more strange than the strange things that had actually happened. That eerie feeling grew constantly stronger. At times the feeling grew to the proportions of actual fear.

The extra food *had* come. And quite good food too. Certainly better food than had ever been fed to prisoners in this stockade before. Martin had found himself in a rather peculiar position upon his return, uninjured, to the enclosure, and with the coming of the food ration, actual suspicion had grown up among the prisoners. It was a conviction of most of them that he was, if not a spy, at least a stool pigeon. As a result, they refused even to speak to him, although they readily ate the better food, and continued the fair system

of dividing it among them all—although at times this division was unnecessary, because some of the food was not consumed.

IT was during the middle of the night, at the end of the week, that a break came in the monotony. Martin, huddled in his snowy bed, heard the challenge of the guard, then the approach of footsteps in the snow. A light shone on him and the guard prodded him erect.

He was led to the gate, and found several guards waiting for him. He walked ahead of them in silence, stumbling along in the darkness. He wondered why they used no lights. Finally they halted him before a small dugout. A low voice in the dark reached his ears. It was John Smith.

"Come inside," said Smith.

Martin entered and stood shivering. "I wondered if you'd ever come," he said.

"I had some trouble getting what I wanted," said Smith in low tones, "but I've got it all now. Also, I had to wait for some new recruits to arrive. Several of them have been detailed to this sector, and we're going to intercept one when he comes to report for duty at dawn."

"Intercept?"

"Yes. You're going to take his place . . ."

Martin snorted.

"As a Jap soldier? I'd make a fine Jap, wouldn't I? All I need is a case of yellow jaundice, because I speak Japanese like a native of Kokomo—Indiana!"

"Kokomo, Indiana?" Smith looked blank. "Where is that?" He ignored Martin's frown, went on. "You won't have to speak. And you won't have to look like a Jap. You will be a renegade German, just as I am."

"I can't talk German either!"

"Some of the Japs talk English—none of them German. You also talk English. You will get by just as I have. Because you will be vouched for by me."

Martin sighed.

"All right. But what's the purpose of all this?"

Smith sat down.

"I'll tell you as much as I dare. First, you are going to become a soldier of Nippon, ostensibly a German volunteer, who can converse with his officers in English. You are going to be a member of the flying corps, and will have a flying suit. You will use that flying suit to escape. All this takes place this morning.

"Next, or rather, before all this can happen, we must overcome a new volunteer arrival, take his place. I will see that you are assigned to the unit necessary. Then you will await orders from your superior officer.

"After that, you will find yourself standing guard duty at a special event—an event which will prove conclusively to you that I am being honest with you, and that the papers I am about to give you right now are legitimate, and of tremendous importance to the American General Staff.

"Finally, when you have decided on my loyalty, and on the truth and value of the information in the papers, you will wait until you are dismissed from guard duty, return to your harracks—except that at the first opportunity while passing through the forest, you will step off the trail, hide, and with the coming of night, fly back to the American lines with the papers. You will be free; Japan will be tricked; America will be able to smash the Nipponese army, and America will once more be free!"

"And you?" asked Martin dubiously.

"I will have fulfilled my part of a solemn pact. And I assure you I shall not regret it!"

MARTIN shook his head in bewilderment.

"I don't get it. Smith, for Pete's sake, who, or what, are you?"

Smith smiled strangely.

"That is one of the things I cannot tell you, because you would not believe anyway."

Martin grew red.

"Why do you keep on insisting I wouldn't believe?" he snapped. "How do you know I wouldn't?"

"I think I'll let you answer that question yourself—tomorrow morning," said Smith. "But now, no more talk. We have work to do."

Smith rose to his feet, procured a small water-proofed silk packet, and handed it to Martin.

"Conceal this beneath your belt. It contains victory for American arms. In it are all the secret plans of the Japanese army, the disposition of their troops, the names of all spies, the strength of all their units, the location of air fields, supply dumps, ammunition dumps and so on."

Martin took the packet, slid it inside his shirt. His voice was hoarse as he spoke.

"If all that is true . . ."

"You will have proof of that in a few hours," said Smith. "And now, we must prepare."

He put on his greatcoat, his cap, his glasses, and led Martin into the night. It was just shortly before dawn, and as the first gray light appeared in the east, Martin found himself concealed beside the trail that led toward the camp.

"We wait here," said Smith.

Martin's thoughts raced as he huddled in the snow. Several times his

fingers touched the parcel inside his shirt. Several times he looked at the calm face of his companion—and each time an eerie sensation stole into the marrow of his bones. And still it was as unexplainable as it had ever been.

Down the trail the crunch of approaching feet in the snow came to their ears. Martin froze into alertness. A man's fur-coated form came into view. He was a Jap. He was the first of a group of perhaps twenty men marching in single file. Smith let them go by. They were spaced about thirty yards apart.

When the last man approached, came abreast, Smith rose, peered back down the trail, and nodded.

"Last one," he said. "Let's get him!"

He led the way softly out of their concealment. Their feet made no noise in the soft snow beside the trail. The squeak of the shoes of their intended victim on the packed snow of the trail was the only sound. Smith leaped on the man's back, and his gun butt crashed down on the back of his skull, the blow muffled by the fur cap. Without a sound the man went down.

Martin helped carry the unconscious man into the thicket, then stood by while Smith calmly choked him to death.

"TO THE animal a humane death," said Smith. "Now, Martin, put on his clothes as fast as you can and follow that platoon of men. Join them without a word. Each has his orders. Yours are here . . ." Smith passed Martin a slip of paper which had a number on it. "This paper will put you in the unit I have selected for you. When you reach there, you will be outfitted as an aerial infantryman. Then you will wait further orders. And now, I must bid you farewell . . ."

John Smith shook Martin's hand, looked at him levelly for a second, then whirled and disappeared the way he had come.

Completely baffled, Martin turned to the task of donning the dead Jap's clothing, took up his gun, made sure the little packet was safe inside his belt, then made his way at a shambling run up the trail in pursuit of the single-file of men of which he was now a part.

He caught up in a few minutes, assumed his distance thirty yards behind the last man, and walked on, his mind in a turmoil.

Not long afterward, he reached an encampment. Without a word he surrendered his slip of paper to an officer, and was directed to a barracks. Inside he was given a complete aerial infantryman's uniform and equipment, and led to his station. He was assigned a flying suit, and ordered to put it to tests and see that it was in perfect condition.

Still in a daze of bewilderment, Martin did as he was bid. All the while, however, an exultance was growing in him. No matter what those plans contained, at least he was now in possession of a means of escape. If it was a trap, he would stand a fighting chance of avoiding it. But if it *was* a trap, it was not understandable. Why such a roundabout way just to kill him?

The more he thought of it, the more he became aware of the fact that John Smith *wanted* those plans to reach the Americans, and that he wanted and would allow Martin to escape.

The only question that remained to be answered was *why*? Because the plans were phoney, and would mean disaster to the Americans if they followed the information? Or, hardest of all to believe, because they were true, and John Smith was what he claimed to be, a loyal American?

There was only one thing to do; and

that was to wait. Already the morning sun was high in the heavens. Another hour or so would tell the story . . .

THE notes of a bugle call startled Martin into action. All around him his fellow soldiers were leaping into action. Martin joined them and in a moment he stood in line, in his flying suit, at attention.

An officer appeared, began barking commands in Japanese. There were no commands in English, and Martin was all at sea. But when the company ascended slowly into the air, in flying formation, Martin took his place with accomplished ease. Secretly he was amused at the crude way in which some of the recruits handled their suits. He caught the officer in command regarding him approvingly as he maneuvered, obeying the orders by familiarity, rather than by recognition.

Then they were on their way, flying in formation just over the tree-tops. For several minutes they continued on in this way, then they reached a clearing. Here they descended and assumed guard positions. It was with a shock that Martin saw the object they were to guard.

It was a hangman's gibbet!

CHAPTER VI

Death of a Spy

MARTIN began to see now why this bunch of recruits had been chosen to do guard-of-honor duty as their first assignment. It was to impress on them the fate of any slips from the straight-and-narrow. It was to instill fear into them, and to insure discipline. Martin's eyes narrowed just the slightest, and his lips tightened. The dirty . . .

An officer strode up to the platform before the gibbet and began addressing the men. Again he spoke in Japanese. He went on for several minutes. Martin stole a glance, saw that the yellow faces of his companions were expressionless and turned straight ahead.

The officer began speaking in English now. His voice was harsh.

"Today we are about to witness the death of a spy," he said. "You, the brave fighters of Nippon, the loyal soldiers of the Son of Heaven, will see what we do to those who betray the Rising Sun." The officer looked straight at Martin. "And to one of you especially, we are offering an object lesson in loyalty.

"The man who will die by the hangman's noose here today is a soldier of Nippon, but he is not a Japanese. He is a German soldier, a volunteer to our ranks. This morning, smitten by his conscience, filled with remorse because of the treacherous things he had done and contemplated doing against the Son of Heaven, he confessed his traitorous deeds and thoughts.

"Because of this, no tribunal is necessary, but the Son of Heaven is just. He will be tried now, before you all. And if found guilty, he will be hanged until dead. It is to your great honor that you have been called upon to participate in the infinite mercy and justice of the Son of Heaven."

The Jap officer's voice ceased, and he turned and saluted sharply.

Across the clearing an armed guard marched, thirty-six men forming a square with ten men on a side. At the center of this square the prisoner walked. He was dressed only in trousers and shirt and shoes. His hands were tied behind him, and his shirt collar was open at the neck. His long hair tossed on his head in the morning breeze, shone in the sun.

Martin could only see the group out of the corner of his eye, because he had to continue staring straight ahead. Directly in his line of vision was the scaffold and the gibbet with its noose swinging in the breeze.

All around the clearing other Jap soldiers were marching into formation, to witness the execution. The Japs were really making a show out of it. Martin's blood boiled in him. Even if the condemned man was a Nazi, Martin felt sorry for him. Confessed? Of his own accord? Perhaps. The Japs had a peculiar code . . .

The prisoner marched into view now, and Martin stared for a moment before the startling fact registered on his brain. The prisoner was not a Nazi. He was John Smith!

STUNNED by the unexpectedness of the sight, Martin stood paralyzed while cold chills ran up and down his spine. And mad thoughts raced through his brain. So this was why he had been given this post! So it was a trap! A trap from which there was no escape!

Now, at last, he knew the truth. Smith had planned it this way. Martin knew that the officer had looked at him strangely. Now he sensed why. And also why his remarks in English had been directed at him, almost personally, just a moment before. He, Martin, was going to die, too, on that gibbet! A double lesson for the assembled troops. And actual proof of the omniscience of the Son of Heaven! They would find those plans on his person . . .! And it would all be over!

But once again the eerie sensation swept over Martin. What kind of a man was this, who could plot his own death, just to impress the rank and file with a fanatic loyalty? And a man who was not even a Jap!

Martin's tongue became sand in his mouth, and he stood there stiffly, waiting, with the certainty of death hanging over him. He was hardly aware that John Smith had been placed up on the scaffold, and that the Jap officer was speaking.

He became aware of the proceedings only when a murmur ran through the ranks of the assembled soldiers.

The trial, the fair trial, of the self-confessed prisoner by the Son of Heaven's justice was on. And although he could not understand the words, Martin caught the meaning of it all.

Accusation, evidence, acknowledgment (a nod of John Smith's head) and condemnation. All with dramatic showmanship designed to impress the attendant soldiers.

When would his part in this weird drama be uncovered? Martin waited with tensed muscles for the finger of accusation to point toward him. And as he waited, a grim resolve came into his mind.

There was one thing these mad, but diabolically clever yellow men had forgotten. He, Martin, was possessed of one great power—the power to die fighting! He wore a flying suit, had the ability to fly it with ingenuity, and he was fully armed! He would not be the only one to die in this clearing! And he wouldn't die in any hangman's noose!

Fingers tensed on the controls of his suit, Martin waited for the slightest indication that would swing the eyes of all to him. When that happened, he would act. But as the moments sped by, and the august wheels of Nipponese justice rolled on, nothing happened. Martin stared at John Smith, standing calmly on the scaffold, and their eyes met.

And all at once, John Smith smiled at him.

Martin was baffled.

This was not the face of a madman. Nor was it the face of a traitor. It was the honest, clear, courageous face of an American!

"But why . . .?" whispered Martin helplessly to himself.

ABRUPTLY the trial was over. A hush of expectancy fell over the assembly. The officers fell back to positions before their commands. The cordon of execution soldiers drew around the base of the scaffold. The executioner mounted the steps, strode toward the prisoner.

Martin stood, shocked. It was going to happen! John Smith, of his own accord, was going to give his life to the hangman's noose!

Stiff with horror, Martin stood there while the hangman adjusted the noose around John Smith's neck. For a moment there was no movement. Everyone waited in hushed expectancy, obviously for some last word from the prisoner.

Martin waited too. The words came.

They came clearly from John Smith's lips. And he spoke in English. Only the officers present understood what he said. But what he said was not intended for their ears; it was intended for those of Japanese Aerial Infantryman Martin.

"My death is your proof!" he said. "Now you will go to victory, and to justice, and to freedom!"

"Proof," muttered Martin dazedly. "Hanged, just to prove to me . . . it isn't reasonable!"

Other words were coming from Smith's lips now; words that were not directed at Martin. They were not directed at anyone in the clearing. John Smith's eyes held a faraway look in them, and he spoke with a glad smile on his lips.

"I do not regret giving this life to my country!" he said.

The hangman sprang the trap and John Smith's body dropped through. Several times his body jerked spasmodically, then it was still, twisting and swinging in the breeze.

The sound of a bugle broke on Martin's ears, and he fell into formation in a stunned manner. His mind was a turmoil of thoughts. Out of the turmoil a pattern was coming.

He, Martin, had on his person *true* information that would mean victory to the American cause. He, Martin, and not John Smith, had to deliver it, so that the Japs would never realize that the information *had* gone back to the Americans, believing with their queer creed of behavior, that John Smith had *not* carried his spying to its completion, but had been smitten with conscience and had confessed and died, for the honor and glory of the Son of Heaven, the Rising Sun, and for the victory of Nippon.

No suspicion, save that of desertion, would accrue to Martin when he disappeared. The Nipponese would carry out their original plan of action, and run into American traps. They would be defeated!

Abruptly Martin realized that his next act was on schedule. In the next few moments, while his company flew over the forest, he must drop behind, float lower and lower, until finally he could drop out of sight and hide until night. Then he could soar into the stratosphere, streak to the east and the American lines.

He watched his chance. Reducing speed, he gradually dropped back until he was last in line. He dropped lower until he was nearly touching the tree-tops. Casting a quick, searching glance behind him, he saw that he was last of the company. He saw that no other of

the flying infantrymen was looking back, then dropped plummetlike to the ground.

Skimming through the air, he evaded the boles of trees, made his way without leaving tracks deeper into the forest. Several miles he went until no sound broke the stillness of the forest depths. He was alone.

Even if they sent out a searching party, they might scour this forest for days and not cover the particular spot in which he now hid. And to make sure, he dove his suit into a snowbank, deep in a thicket. Completely covered, he lay there, warm in his suit. He waited . . .

HOURS later, when his chronometer told him the sun had gone, he emerged from his snowy bed, peered around in the darkness. Nothing was visible. Up above, through the trees, he saw the deep purple of the night sky, and the brilliance of millions of incalculably distant stars, shining in the purple depths.

He drove his flying suit toward the zenith at top speed, an invisible inverted meteorite. Once at ceiling, he flew toward the east and freedom.

As he sped along, thoughts continued to crowd through his mind. Thoughts of John Smith. What was the strange pact that he so often referred to? Why had he said so often that there were things he couldn't explain because Martin would not believe them anyway?

Where had he come from?

Who was he anyhow?

Certainly his name was not John Smith. Just as certainly as it had not been Kruger. Martin remembered Smith's hesitation that first time he had given the name of Smith. Obviously he had deemed it wise to conceal his real name. But why?

And again the memory of the eerie way John Smith had come into Martin's life came into his mind—in the red-lit darkness of a machine-gun nest on a hillside, just in time to take poor Joe Jason's place at the gun, and wreak havoc in the Jap land battleship fleet that was attacking. He had come out of nowhere like a ghost.

And behind him had been a strange American flag—with not enough stars in its blue field. Behind the flag had been many men—men who marched by, yet left no footprints.

Then how had John Smith disappeared into the dawn, discovered an enemy supply dump twenty miles away, and returned, all within four hours? A strong man might have *walked* that distance. He *might* have . . .

All those strange moments when familiar things, or things that should have been familiar, were mysteries to John Smith; the reference to the school teacher in Boston . . . Van Huyten, was it? . . . the statement that once before he had been a spy . . .

And what had his cryptic last words on the scaffold meant?

"I do not regret giving this life to my country."

Once before someone had said something like that on a hangman's scaffold . . .

Martin's body was swept by the cold breath of that familiar eerie feeling, but he thrust the thought aside.

Yes, there were things that were too fantastic to believe! The man's name had not been John Smith, of that Martin was sure.

But then, what *had* been his name?

Some things are too fantastic to believe . . .

Today there is a statue in Boston. The figure of a man, dressed in the uniform of the American Flying Commandos. Beneath the statue is the inscription: "Because he did not regret to give his life, America owes him its freedom!"

And many free Americans wonder at the incongruity of the statue, for the figure on the pedestal wears a peculiar tri-cornered hat which is entirely out of keeping with his modern commando uniform.

John Smith was his name.

THE BATTLE OF EVOLUTION

By Lynn Standish

What mode evolution take the trend it actually took? Here are some thoughts on that subject

HOW would you feel if you picked up a mirror and looking into its reflecting surface saw before you a six legged creature about the size of a dog—clad in a stiff shell like armor. Two large beady eyes would probably stare you into submission as two radio-like antennae vibrated rapidly. You would either look on with horror, or if the fighting type, would attempt a futile struggle. None of your blows could penetrate this creature's armor. Your movements could easily be observed from any position of this creature's head. You could never match your wits with this horrible creation—he being the more highly intelligent.

About 225 million years ago, one of the great-

est struggles of all time took place, and it was the outcome of this struggle that decided the appearance of 20th century man. Had the land-vertebrates lost this battle to the orthopoda, we would probably look very much like that horrible insect we beheld in our imaginary mirror.

The battle was not a one day affair. It took about 165 million years to decide the issue—the battle lasting the entire Mesozoic period. The quarrel for supremacy was fought between an army of giants and an army of dwarfs. The giants took the form of huge land vertebrates—the mighty dinosaurs, snakes, and winged reptiles. The dwarfs were composed of an army of hideous looking creatures—none larger than the smallest

mouse. The battle was fought through the weapon of evolution. Each army trying to acquire those bodily structures that would enable it to survive its cruel environment. The army that could best survive its environment, because it had acquired the best tools with which to do so, would become master of the earth. It would continue to develop new species; it would spread out and become a ruler answerable only to the laws of nature.

On the other hand, the army less suited to overcome the handicaps of its environment must forever give up its chance to rule the earth. It must forever continue as an inferior stock—slowly decreasing in number as the jaws of environment come closer and closer.

With these stakes involved the two armies locked in the greatest battle of evolution. Both armies had been well seasoned for the showdown. Each had started from a one celled animal—perhaps from a half plant and half animal like the fast swimming *Euglena*. Both had discovered the fact that two sticks together are harder to break than the corresponding two sticks would be when separated. So they combined many millions of cells into a single working unit. In such a manner, each cell worked for a common cause—namely, preservation against a roughening environment.

Soon each army began to specialize in this weakly organized group of cells. Certain cells became fighters, some became food getters, some became telephone operators and served as a means of keeping each cell informed as to the activities and feelings of his brother cells.

Up till now each of the armies had traveled the same road, but soon their ideas on how to develop the most efficient body machine differed, and each took a different path. Both armies did admirably well in the path they had chosen and now the showdown was at hand. Both had come a long way since their one-cell stage. Both had devised ingenious mechanisms for getting food, feeding all the cells, excreting wastes, protecting itself, and so forth. Now the important question, "Whose system was the best one?"

The pride of the Orthopod army was its hat-tail of insects. The insects were to represent the orthopods—were to defend the path the orthopods had taken when they parted from the land vertebrates. When the mighty Goliath of a dinosaur beheld his insect opponent he must have shaken with laughter. Why any land vertebrate, of which he was the supreme example, was larger than the largest specimen of insect. Even the lowly mouse put the insect to shame when it came to size. "True," thought Mr. Dinosaur, "the insects can easily outnumber us, because being so little they develop large numbers of offspring. But, on the other hand, being so small, a pack of insects can only annoy me and never destroy me."

MR. DINOSAUR was right. The insect was too small to do great harm. But why had the insect taken a path which had ended in dwarfism? Where in Mr. Insect's evolutionary path had he slipped? We must look to the respiratory system of an insect for the answer to that question. Upon examining an insect's respiratory system, we note that it consists of an air tube arrangement. Air enters directly into the insect's body via openings in its chitinous armor. The air carrying precious oxygen, makes its way through these air tubes and slowly diffuses to all the oxygen hungry cells in the insect's body. This is a very efficient system, but only if the animal who possesses it remains small. An arrangement of this sort, where the slow process of diffusion is evolved, can only work where all the oxygen hungry cells are concentrated about a small area. The dinosaur could never have attained his height with this arrangement. The dinosaur took a different respiratory path—a path that fostered growth. He developed a rapid flowing blood system to carry his oxygen to all parts of his big frame and so he had won round one of the battle.

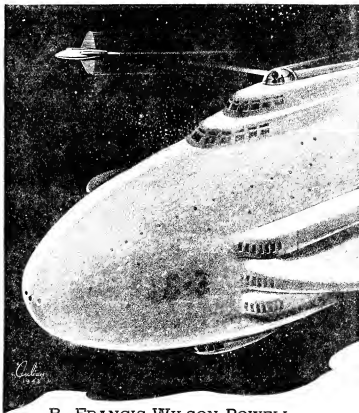
By winning round one the land vertebrates automatically won round two and with it the final decision, since being dwarfed the insects could not develop the elaborate voluntary reflexes that the land vertebrates were capable of. True, the insects had developed an instinctive type of life which was perfect to behold, but it could go no further. An insect was doomed to a life minus thought. An insect would also have to follow his perfectly developed instinct—always be its slave.

Ironically enough, both of the armies present that Mesozoic days have long since ceased to live. The proud dinosaur is a thing of the past to the 20th century man. So are the insects that stood their ground against their giant foe. Who won the battle? That is a question hard to answer. We, 20th century man are the descendants of Mr. proud Dinosaur. The bee, the ant, the grasshopper, are the descendants of the dwarf army. We still use grandpa dinosaur's blood system of circulation; we may have added a chamber or so to his heart, but essentially the pattern remains the same. We have improved grandpa's brain; we have added many more reflexes and increased the number of folds in our cerebral hemispheres.

The insects on the other hand, are still as instinctive as ever. They still are dwarfed,—still have kept their air tubes and armor coats and still outnumber us. But, the victory is ours. We have gone a long way since Mr. Dinosaur; they have relatively stood still.

Still, they are forever trying to justify their path and if some environmental change favors them, the ruling class of the world may someday resemble our imaginary, we hope, mirror visitor.

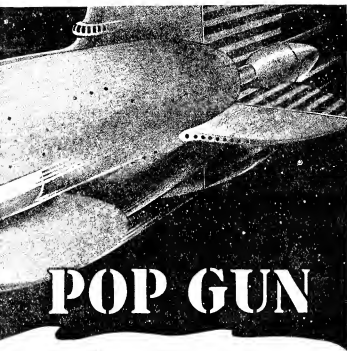
READ FANTASTIC ADVENTURES TOO



By FRANCIS WILSON POWELL

THIS is a story of the star-ways, and of two men who made them safe for commerce, in those far-distant days when clumsy rocket ships were the only means of transportation . . . when raiders still preyed on peaceful ships . . . and every flight was a gamble with death.

WITH ITS INCANDESCENT tubes paling to cherry red, as the blast diminished, TSL "Arcturus" prepared to stop. Gigantic beyond belief, the pride of Terra-Saturn Lines was imperceptibly slowing. Her sleek hull, studded with glowing portholes, hung against the black velvet of space like some



There was a brief flash from the gun turret

The Arcturus was a passenger liner, not a battleship. What good was her "pop gun" against the enemy?

graceful, silvered monster of the deepest seas. Yet, even here, in the interstellar vacuum, the "Arcturus" great weight seemed to rest solidly on some invisible substance barely able to retard its forward rush. Hour after hour she bored ahead, with much the effect of a legendary ocean vessel slithering

through surface ice. At last, there showed the boiling, blazing fountain of forward retarding rockets gushing madly to brake the ship's free flight.

Even before this, though, passengers and crew were safely strapped in their deceleration chairs—but not gladly, nor with good grace.

Some passengers were frightened. Others, with pressing business appointments, promptly began thinking in terms of law suits to compensate them for lost time. But, frightened or annoyed, the worst they imagined was some minor mechanical difficulty. In these well-ordered times, unlike the days of early flight, the great liners *always* went through on schedule.

Strapped in his chair on the bridge, Captain John T. Barker took a graver view of the situation. Down in the forecabin, speculation seethed. Captain Barker, in response to a curt radiogram, had ordered the blast shut off. Such action in space was unprecedented, yet no reason had been given. By inference, an Admiral's inspection in mid-flight must be serious.

Captain Barker divided his attention between stopping the "Arcturus" and mentally reviewing this trip, so uneventful to date.

Down in the crew's quarters, there was heated discussion. Not knowing why the ship was stopping, they were startled and a little fearful. But mostly they were annoyed at the inconvenience of being strapped in deceleration shock absorbers and at the extra work involved with getting smoothly under way again.

"I'm telling you," said one old timer, "I ain't never heard of such a thing before. You mark my words, there'll be trouble before we're through with this."

"Ob, shut up," snapped another man from the depths of his blankets.

"Haw, haw!" said big Mike, the oiler. "Listen to Delancey. Got a cold in his head and wants to bite everybody."

Jim Delancey's normal grin reasserted itself as he asked, "Did you ever have a cold? No? I thought so. Nobody ever had a cold but me, but you *will*."

"You give me a cold and I'll brain you," said Mike. "Where'd you get it, anyhow?"

"Bet he caught it from the Captain," chimed in another man.

"Well, Ben, why not?" Delancey asked. "I catch everything else unpleasant from him." He wagged his blond head in mock sorrow. "I never saw such a man for finding things wrong!"

"What a pair of love birds!" Mike remarked sarcastically. "Delancey and Barker, two hearts that don't beat as one."

"Sure," said Delancey, "we love our dear Captain. Just the same, I'll bet he's back of this stoppage. Got some new idea for deviling us."

"JIM," Ben interposed, "you know darned well he wouldn't risk his pretty pair of eagles delaying a flight. It's sure lucky you don't really hate him as much as you pretend."

Jim Delancey grinned sheepishly. "I guess you're right. He's just doing his duty. But if he wants to be such a stickler for perfection, why didn't he go in the Navy?—Instead of standing around here talking to big shots and polishing those white collar ornaments of his."

"The way I heard it," chimed in the old timer, "he did go through the Academy. Graduated Number One Man in his class, too."

"What!" chorused the other men.

"Sure. He's an old Navy man, but it seems his pa had lots of money—enough to buy into TSL—and little Jack figured he liked social position better than duty in the Service."

"Could be," mused Delancey. "At any rate, I'll give him credit for knowing his stuff. He rose awfully fast, but he's a good Captain—so long as things go well. Wish he wouldn't pop a rivet,

though, every time he sees a grease spot."

"What still gets me," said Ben, "is the way he goes around looking so proud of his Captain's eagles. TSL may have a nice trademark, but he's going to rub them right off his uniform. Ever watch him when he's thinking?"

A couple of the men grinned as they remembered their towering, dark-haired skipper's habit of petting the platinum birds on his lapels.

"O.K., boys," said the old timer. "Ship's about lost way. Here we go again."

They prepared to unfasten their harnesses. Meanwhile, the object of their discussion, Captain John T. Barker, was already up and about. Well over six feet, and powerfully built, he had the face of a stern executive—until you looked closely. Then you saw the faint trace of childish pettiness that should have been outgrown long ago. Captain Barker was the perfect martinet. With all the makings, physical and mental, of an excellent officer, he was still given to posing in public, to enforcing unnecessary regulations.

More than once, Jim Delancey, peering up at his commander, had wondered whether it was worth the risk to swing on that spoiled brat's face. Maybe a healthy sock would break away his conceit and show a real man underneath. Jim often wondered.

AT this moment, Captain Barker had finished his mental review of the ship's conduct and could find no fault in it. He shrugged off his worry and looked out for a first glimpse of the approaching battleship. Whatever the reason for this order to halt, surely it couldn't affect his career.

He turned to his Chief Officer. "Sound General Quarters, Mr. Andersen."

As the "Arcturus" slowed, with its alarm gongs clanging, the huge battle cruiser slid precisely alongside and made fast.

Captain Barker called a Bo'sun's guard to the gangway and, with considerable trepidation, watched the Admiral approach through the air-tight tubing. Rapidly, he rechecked the condition of the ship, as he tried to puzzle out a reason for the boarding. This was the first time in his smooth career he had been halted in deep space. Nevertheless, his greeting was punctiliously courteous.

Admiral Williams returned his salute and cast an admiring eye about the grand salon.

"A beautiful ship, Captain," he commented. "Amazingly fast! Now will you be so good as to call your First Officer, and we will proceed with the inspection."

They passed through the salon and dining hall, then into the passenger corridors. Though their pace was swift, it became more and more evident that this was no casual inspection. Captain Barker noticed that the Admiral's sharp eyes missed no smallest detail. As they passed man after man, at his post in spotless whites, the Captain relaxed slightly. At least, Admiral Williams would find no fault with his management of the ship.

Returning from an unprecedented, minute inspection of all cabins, they found an apprehensive group of passengers in the grand salon.

"Tell me," said one man, bolder than the rest, "is anything wrong? I've got to meet a client on Earth. Very important, can't be late."

Captain Barker spoke reassuringly. "Only a routine inspection. TSL is never late."

The passenger moved away, muttering uncertainly. Captain Barker

thought he'd like to know, himself, what was going on. Then he caught sight of the Admiral staring fixedly at TSL's white winged trademark, carved above the main stairway.

The Admiral turned to him. "Captain," he said, "that is a handsome insignia."

"Yes," the Captain agreed enthusiastically. "We are very proud of our bird. I'm sorry, though, the carving is so dusty."

He turned to the First Officer. "Mr. Andersen, log the steward in charge—and see that the bird is thoroughly cleaned."

Admiral Williams glanced at him quizzically, then remarked with a wry grin, "I hadn't noticed the dirt, but I trust your birdie's wings are strong enough to carry you in safety."

"They always have," answered Captain Barker. He tried to make out some hidden meaning in the Admiral's remark, but gave it up. "Will you see the bridge now, sir?"

"Not yet. Rather go below for the present."

LEAVING the luxurious main deck, they descended to a maze of shinning, uncarpeted passageways deep in the ship. Hard, bare walls reflected the light of many lamps. A thoroughly unpleasant place, reflected Captain Barker. Fortunately, it was clean and polished, but he seldom ventured down from the comfort of the bridge and salons. There were no top executives down here to tell the owners what a fine Captain he made. So long as the Chief kept his motors in condition, he was willing to leave that part of the ship strictly alone.

As Admiral Williams' practiced eyes surveyed the dynamo room's intricate wiring, the switchboards, and relays, Captain Barker found himself acquir-

ing more respect for the man than his rank alone could inspire. Quite obviously, he knew as much about the machinery as did the engine room crew, far more than Captain Barker himself. The Captain made a mental note to spend more time in these regions. Some day he might be the Inspector and it would be mighty impressive to look as though he knew all about everything. Thank goodness, the Admiral wasted little time asking questions!

They passed on to the big fuel converters and driving blowers, where, to Captain Barker's chagrin, the Admiral dabbed the toe of his shoe into a spot of lubricating oil. It was far under a blower bearing, and he moved on without comment, looking carefully into the machinery. Automatically, First Officer Andersen entered the faux pas in his little black book. Somebody would catch plenty, later on.

To the Captain's surprise, Admiral Williams shook hands with the Chief.

"As fine an engine room as I've seen," he smiled. Then he led the way back to the boat deck.

Here, for once, the Admiral was all action. Into and out of all twenty life boats he climbed. His keen eyes took in every detail of equipment. From time to time, he nodded his head approvingly. Finally, he spoke.

"Captain Barker, when were these boats last inspected, and by whom?"

"Yesterday, sir, by the Bo'sun's Mate."

"Excellent! However, I would suggest that you have the Chief engineer recheck."

"Yes, sir."

"Now!"

Issuing the necessary orders, Captain Barker escorted the Admiral to the bridge. There, the old Navy man looked intently into each magnifying vision screen, questioned the naviga-

tors, and returned to Captain Barker.

THE latter, meanwhile, had been studying the great warship lying alongside. Only part of its hull was visible through the porthole, but that portion showed it to be a mighty engine of destruction. Thoroughly modern throughout, it showed no guns on its smooth exterior. Only the blank eyes of quiescent ray projectors indicated its powerful armament, but there were weapons of all sizes by the score. Captain Barker idly speculated on the number of generators required to power them. There wouldn't be much room left over for comfortable living quarters!

"Well, Captain," the Admiral finally said, "I'm very glad to see that your ship is in first class condition. It had better be!"

"May I ask why?"

"I was coming to that. Two fast liners have disappeared and a third was found ripped wide open, with all hands dead. We couldn't send a message because the news services might have picked it up."

Captain Barker was shocked. So far in his career, he had faced no danger greater than take-off and landing operations. His climb in commercial ranks had been effortless and rapid.

He questioned the Admiral. "Any clues?"

"Only that, like you, they were all carrying valuable cargoes. The one we found was badly scorched, as though by a ray gun. It seems obvious the pirates are getting back into action."

"Pirates! I thought they were just something in the comic strips."

"Apparently not. We believe it is a well-organized gang, under competent leadership. Either they have several ships or else they have developed something unheard of in the way of speed."

"Well, the 'Arcturus' can show a pretty pair of heels to anything in space."

Admiral Williams smiled. "She can certainly show her heels to us! I understand your cruising speed is around 80,000. My flagship can't quite make that. We'd like to escort you in, but my orders are to station the fleet across the commercial lanes until something definite turns up."

"By the way, you aren't fixed very well for fighting, are you?"

"No, sir," answered Captain Barker. "We have the big turret gun and a few shells for courtesy salutes. I wish we had a battery of your new 'Flashlights.' Then we could put up a fight."

"Right now," said the Admiral, "I wish our new ray guns had the range of your long rifle. The rays are destructive within their limited range, and they don't miss. On the other hand, your shells, presumably, keep on going until they hit something—only try and land on a target you can't even see, at a distance of ten hours! Sorry we can't give you a supply of shells. Haven't a one on board."

Captain Barker laughed aloud. "A battleship without shells! That could be funny—if we were safely in port."

"I suppose so," answered Admiral Williams. "As soon as I leave, you'd better get under way. Take every precaution."

"Blackout, sir?"

"With your rockets flaring? Hardly! Just get going *fast* and watch closely."

CAPTAIN BARKER hit his lip in mortification at his ridiculous suggestion of blacking out the ports. Whatever he did, the exhaust flares would be visible all over this part of space. Why couldn't he watch his tongue? Talking without thinking certainly wasn't going to advance his career.

They had been walking toward the air-tight gangway as they conversed. Admiral Williams gave one last bit of advice.

"If you are attacked," he said, "get your passengers and crew away in the life boats. Have them scatter in all directions and wait for us to pick them up."

He held out his hand. "Good luck, Captain."

"Thank you, sir."

Captain Barker watched the Admiral recross to his flagship. In another minute, the long, menacing-looking battle cruiser slid away.

Back on his bridge, Captain Barker sounded the alarm for acceleration positions, then ordered on full blast. The "Arcturus" slowly gathered way and forged gradually ahead of the fighting ship. In a few minutes, the warship was out of sight behind the "Arcturus" flaming tail.

At this moment, for no logical reason, Captain Barker remembered a dereliction on the part of one Delancey, crewman.

In response to the Captain's summons, Jim Delancey mounted the bridge with a certain amount of apprehension. Offhand, he couldn't think what misdoing might be about to be punished. Yet, crewmen were not often called "Upstairs" unless there was trouble brewing.

Standing smartly to attention, he saluted Captain Barker. The Captain wasted no time getting to the point.

"Delancey," he asked, "what day is this?"

"June second, sir," Delancey answered in surprise. "Why?"

Immediately, he regretted that last word. Captain Barker visibly ruffled, but kept his voice quiet.

"And what, Delancey, is your duty on the first day of each month?"

So *that* was it! Delancey gulped, then started bravely quoting the Manual.

"Sir, on the first day of each month, my duty is to inventory every movable article of ship's property, to note its position and condition, and to furnish the Captain a written report on same, together with my recommendations for replacement, repair, or other obviously necessary action." He got all this out in one mouthful, gasping for breath as he paused.

"Very good," replied Captain Barker. "May I please have the report for June First?"

"Sorry, sir, it's not ready."

"Not ready!" The Captain's voice was ominously quiet.

"No, sir. Yesterday I had a bad cold. Today we were decelerating until the Inspectors came aboard."

"Well, Delancey, I do not recall anything in the Manual about delaying reports, except by expressed permission."

"But, sir, out here in space, nothing could be stolen and I felt I should not be among the passengers with a cold."

"You are perfectly right, Delancey. You should not. Neither should you be among the crew. We can't have them all sick."

CAPTAIN BARKER turned to an annunciator.

"Bo'sun," he said, "kindly place James Delancey in confinement. Charges? . . . Item One: Dereliction of duty. Item Two: Willful exposure of crew to infection."

He turned to Delancey. "You will be tried by Ship's Court, at a time to be specified by the Chief Medical Officer. You may go."

"But, sir—"

"You may go."

"Yes, sir." Delancey carefully saluted and executed a perfect about face.

All the remainder of this day, Captain Barker remained tensely at his post, watching the screens and waiting. It was difficult to realize the danger, but he knew he was waiting for the turning point of his career. Perhaps it was fortunate that he had not stayed in the Navy. In these hours of waiting, there was no eagerness to meet the enemy. He turned over and over in his mind only the one thought of how he and his ship would come through whatever crisis might arise. Toward evening, the tension relaxed. Nothing had happened. Nothing was in sight. He relinquished the watch to Andersen and dressed for dinner. Tonight, especially, he must impress the passengers with his importance, with a sense of casual routine being carried out to the letter.

SOME days later, when his cold was better, Jim Delancey stood trial and was convicted on both counts. As was the custom of Terra-Saturn Lines, the Ship's Court offered him the alternative of accepting the Court's sentence or of naming his own. Either or both might then be imposed, at the Court's discretion.

"Sir," said Jim to Captain Barker, who served as President of the Court, "I request assignment to all the hard physical labor aboard ship, until we dock."

Captain Barker was taken aback. He had been thinking and had come to the conclusion that he had been unnecessarily harsh. The tentative penalty had been set at loss of one week's pay, but the prisoner had not been so informed.

He questioned Delancey, who replied, "I figure that you can do only three things to me. You might lock me up, which would make the crew shortbanded. You might fine me, but there is no way to spend my pay in

space, anyway. Or, you might turn me over to the Civil Authorities in Port. You won't do that because the law requires that sentence be passed within a reasonable time after conviction. Since I have neither destroyed property nor injured anyone, the Authorities may not show much interest in a case three months old."

Captain Barker watched the crooked grin that flickered across Delancey's face and was definitely annoyed. The man had him, and he knew it. Still, a sentence to hard labor might keep the rest of the crew on their toes.

"Request granted," he snapped. "Court is adjourned. Bo'sun, put the prisoner to work."

"Yes, sir," answered the Bo'sun. "Delancey, get below and clean the injector pumps."

Captain Barker left the wardroom with a feeling of bafflement. Delancey had certainly given himself the short end of the deal, yet the Captain had an uneasy feeling that he had had something put over on him. He shrugged it off. Perhaps, Delancey feared incarceration so much that he would do anything not to be locked in the brig.

The next day, he saw Delancey on his hands and knees, scrubbing the Grand Stairway. Again, he felt irritated as Delancey smiled at him. He seemed to be thoroughly enjoying his work.

"Delancey," he spoke sharply, "is that necessary? Use a floor washer."

Jim waved a casual hand at the machine beside him. "Gum, sir. Machine won't pick it up." He scrubbed harder as the Captain moved away.

Later, Captain Barker entered the bridge, to find a pair of feet sticking out from under the plotting table. He queried the Quartermaster.

"It's Delancey, sir. He's taping a chafed wire."

The Captain ordered Jim to stand up and demanded to know why he, instead of the electrician on duty, was fixing the apparatus.

"Sir, it was only an electric light wire and the electrician is wearing his dress whites."

THAT same night at dinner, the charming young lady on Captain Barker's left pouted and told him, "Captain, I don't think you're very nice—the way you work that cute sailor all the time."

Captain Barker answered hastily, "I don't. He asked for it, himself."

He caught himself. Why should *he* be apologizing? Delancey was guilty, not he.

On his inspection tour next morning, Captain Barker entered the library and found Delancey, as usual, on his hands and knees. He should have passed by. Instead he demanded, "Now what are you doing?"

Delancey put down a sticky glue pot and saluted.

"Fixing the carpet, sir. May I suggest you recommend a new one, from wall to wall, when we reach port?"

"You may not. Er, why?" The Captain clicked his teeth in annoyance at himself. There was no need to discuss it, but Delancey chattered on.

"The passengers, sir. It annoys 'em."

"Nonsense!"

"Here comes a group, sir. Watch."

Three or four passengers entered. The last man turned his head toward his companion as he stepped through the door and stubbed his toe on the edge of the rug.

"You see, sir?" Delancey asked. "He might have fallen and sued the Line."

"Perhaps you're right, Delancey," Captain Barker said thoughtfully.

"Well, never mind. Go find something else to do."

Confound the man! He was always under foot and always looking happy as a lark. There was no satisfaction in punishing a man who enjoyed it. If he would only be insubordinate, something might be done.

ABSENT-MINDEDLY, Capt. Barker rubbed his lapel insignia. Then, meditating on the injustice of life, continued his rounds. Just because somebody didn't do his duty, why should he be plagued with him everywhere he turned? But, come to think of it, what good was that silly report Delancey had neglected? Of course, the Manual called for a monthly report, but it was useless work on a liner as well kept as the "Arcturus."

The Captain beamed to himself as a light dawned. A new Manual! That's what Terra-Saturn Lines needed. The present hook of regulations dated back to the tubs of a century ago. A new Manual, emblazoned with the author's name, that was it. In his mind's eye he found great satisfaction in contemplating the name "John T. Barker" tooled in the soft leather cover. Another step in his career—he'd go to work on it as soon as they reached port.

Meanwhile, he'd get that blasted Delancey out of sight. He summoned him.

"Delancey," he asked, "don't you think you've worked out your sentence by now?"

"Oh, no, sir, I haven't done much yet. But, with your permission, I'd like to make a suggestion."

To himself, the Captain wondered what next. Aloud, he said, "Go ahead."

"Well, sir," Delancey continued, "I've shipped three voyages on the 'Arcturus.' In all that time, we have never fired the salute gun. Now, sir, I figure it this way. If we took off the

gun, we could carry about fifty tons more cargo. On the other hand, if we keep it, we haven't enough shells to protect ourselves against an attack."

"Attack!" exclaimed the Captain, startled. "Attack! Why, nobody's going to attack this or any other ship."

"I hope not, sir! But, then, we don't need the gun."

"Delancey, ship design is no concern of yours. By the way, you may return to your usual duties."

"Thank you, sir. I don't wish to disobey, but I have the right to serve out my sentence."

"Very good, Delancey. You may serve out your time."

"Thank you, sir," Delancey grinned. "It's much more interesting than checking stock." He saluted and departed.

Now what have I done wrong? the Captain speculated. He hadn't cut a very impressive figure, he knew. And, even worse, Delancey's point was well taken. Maybe, just maybe, the Captain himself could tactfully recommend the change. After all, this was a modern age. There was no use in clinging to convention when new ships were designed.

Then, recalling the dread of a few days ago, he made a resolution to recheck the supply of ammunition.

THAT night, as he nodded graciously to the passengers, the important ones who shared his table, an orderly whispered in his ear. Captain Barker arose and made his apologies. A trifling matter, he told them. He would return shortly.

Unfortunately, Captain Barker had to postpone his meal for some time.

Reaching the bridge, he found a worried Andersen awaiting him with a radiogram. It was brief: "Overhauling you rapidly. Heave to or we attack." No signature or identifying

code marked the message.

"Pirates!" Captain Barker muttered.

"What?" gasped Andersen.

"What, sir!" snapped the Captain. "Pirates, I said. Have the long rifle manned."

"Yes, sir."

Captain Barker noted with satisfaction that, whatever excitement might be seething within his men, there was quick, orderly action. In a matter of seconds, his telephone buzzed.

"Turret crew standing by, sir. Ammunition hoist operating. Estimated range, dead astern, three ess ell (Ed. Note: "Three seconds, light" or 558,000 land miles). Confirm."

There was nothing slow about that gun crew! Even though they had never been in action, repeated loading drills showed their effect.

Captain Barker quickly consulted the Chief Navigator, then called the turret.

"Range, two point eight seven five. Fire at will."

Smash! The "Arcturus" shuddered and leaped forward under the impact of its twenty-four inch gun. Captain Barker staggered with the jolt and leaped for the turret companion. Smash! The next shot nearly knocked him down the stairs. Smash! Those boys certainly were loading fast.

He braced himself against the turret wall and watched the men loading and firing with as much precision as though they had been fighting all their lives. Somehow, this didn't seem like a real battle, but he was proud of the strict discipline that had made the crew the perfect team they were at this moment. The great gun's view finder was entirely blanked out by swirling exhaust flames. The enemy could not be seen, as would have been the case with the gun aimed forward or sideways, but the recoil of every shot was adding to their

speed. The shells would not reach their target for many hours, nor could missiles from the enemy reach them as yet. The two ships were inconceivably far apart.

Captain Barker ordered the blast cut off for a moment, while he turned up the vision screen to extreme magnification . . . Nothing! No doubt the attacker was blacked out forward and, with no atmosphere to reflect the fire, its rocket blast would be obscured by the pirate ship's own hull. He gave another order and the "Arcturus" again went blazing through the night of space. Its speed had climbed to around 90,000 miles an hour. If the tubes did not burn out, they might outrun their attacker . . . if there were any attacker.

A DOUBT crept into his mind. Was this nightmarish chase an illusion? The message could have been a practical joke. Here they were, shooting at an invisible enemy. They were fleeing for their lives in the fastest ship known, yet no projectiles came near. As the wild flight continued, Captain Barker decided to go down and reassure the passengers. Rather than seem a fool, he could always tell them it was gunnery practice. After the sudden stoppage by the warship, they might be skeptical, but they had no way of proving anything.

He had already ordered suspension of firing to conserve shells, when the Gunner's Mate tipped off the whole situation by remarking the attacker must have short range ray guns. If that were true, the "Arcturus" was doomed—always providing the pirates could approach within range. Yet, how could any builder cover up the construction of secret Navy weapons on an object as conspicuous as a spaceship?

At this juncture, Jim Delancey came staggering up the companion. He was

streaked with sweat. His hair hung in his eyes and his shirt was in tatters. He looked exhausted. Still, he managed a smart salute.

"Captain," he asked, "shall I dump the last three shells on the hoist?"

"The last three!"

"That's all, sir." He smiled impudently. "Don't usually have to work so hard checking stock, but it's kind of fun, at that . . . sir."

Captain Barker started to send him below, but checked himself. After all, he did look all in, and an executive belittled himself when he rode a man too hard. He spoke in almost a kindly tone.

"Better take a shower, instead, Delancey. We'll have someone else load them. Gun Captain, send down four of your men to stack the shells up here in the turret."

Some hours later, Captain Barker ordered the blast cut again, in order to search the velvet dark for traces of their pursuer. And, this time, as he turned up the magnifying screen, he saw a star—a very faint star—where none should be. As he watched intently, the tiny flame crept past one of the screen's myriad cross hairs. It was the pirate craft!

Swiftly calculating the painfully slow rate of approach, as against their distance from port, Captain Barker realized that they would fall within ray range long before they could reach safety. He decided to gamble on his last three shells. If they missed, there was still the alternative course of action which he had persistently pushed back into the dim recesses of his mind.

He consulted with the turret crew, then ordered rapid fire. Aiming point blank over their own stern, the "Arcturus" men let go the first shell. But, this time, the gun pointer's hands shook a little with the responsibility. He

knew it was a miss. The last two shots fled back toward the target, as true as any aim could be at that distance.

Captain Barker ordered on the blasts. Once more they streaked across the sky. They waited for an interminable time. The pirate ship still approached. All three shots had missed. They were unarmed now, easy prey for the marauder.

IN THIS crisis, Captain Barker's mind could no longer fight off the plan which had been slowly forming. He ordered the crew assembled. In the few moments before they gathered, he searched his mind for the right words.

Then he addressed the men, slowly and clearly.

A stir ran through them. Literally too shocked to move, they stood fast while a wave of violent emotion washed across their faces. Only the flood or ebb of color and a quick flicker of their eyes betrayed the sudden fear that swept them all. The intake of their breath was a bone-dry rustle in the silence. Still, they stood fast.

Growing measurably in his men's eyes, Captain Barker swept a brief glance down the ranks.

"You may still leave," he spoke softly. "What? No deserters? Thank you, gentlemen."

Probably twenty men, at that moment, would have fled to the life boats—had one man so much as moved in the first seconds. Now they were all committed to obvious mass suicide.

Captain Barker weighed them again. There was no reason for them to stick by the ship, except a pride he had not realized they possessed. A slight movement attracted his attention.

"Yes, Delancey, what is it?"

"If the Captain permits, may I have a word in private?"

"Certainly, Delancey."

They entered the bridge, leaving the crew behind to break into a furious clasp of accusing glances. Confused exclamations of, "Why didn't you say something?" "What are we, half wits?" struck on the metal walls and rebounded into expectant silence.

Shortly, Captain Barker and Jim Delancey re-entered, and the silence resounded with unasked questions.

Captain Barker hesitated, then spoke.

"Men," he said, "I do not wish to raise false hopes, but Delancey has a plan by which, he believes, we can destroy the pirates without harm to our own ship.

"It seems to me a preposterous idea, but you may judge for yourselves. All right, Delancey."

DELANCEY cleared his throat and shuffled his feet.

"Well, boys, it's like this. Last time we were in dock I had a date with that cute blonde, remember? And I couldn't promote any dough, so I took her to the Museum of Ancient Artifacts. No, she didn't like it, either. But I saw something in the kids' section, a toy they used to play with.

"The sign called it a 'Pop Gun' . . . Pay attention, Mike, you're the guy who wouldn't lend me any money, so you get stuck with the dirty work!

"Anyhow, this Pop Gun was a funny looking thing with a cork in a big barrel. When you pulled the trigger, it released compressed air which drove out the cork. Frankly, I don't believe it could do much damage, but maybe it made such a loud noise it scared people.

"So, now I figure we've got the big turret gun and it's no good to us without ammunition. Also, I believe I know the whereabouts of every single thing in this ship—and how to take it apart."

Delancey stopped uncertainly.

"Come on, Jim," said Mike, "get on with it. Where do we come in?"

"All right, then, you go get a wrench and screw driver. We're going to root up some furniture. Ben, you burn a hole in the gun breech and weld on a two-inch pipe connection. The rest of you guys start smashing up pots and pans. Wad them into small balls."

"Are you nuts?" called a voice from the back row.

"Quiet!" thundered Captain Barker. "Delancey, you'd better explain more clearly. Then, if these gentlemen can't think of a better plan, you will be in full command of the working party until further notice."

He turned away and headed for the gun turret.

"Well?" asked Mike.

Delancey promptly answered, "We're going to fill the long rifle with junk and blow it out the back by compressed air. Then—I hope—the pirates run into it, just like that . . . Pop!"

"Let's go, Mike," called Ben. "Jim's off his nut, but I'm crazy enough to follow his idea. Let's get to work while there's time!"

Within an hour, Jim Delancey's "Pop Gun" presented a weird sight. From the breech halfway up the barrel, it was stuffed with assorted odds and ends that would have driven a magpie crazy with delight. Blobs of metal melted down from cooking utensils, gleaming metal chair legs, even a sizeable collection of coins donated by the passengers—all crowded each other in the great rifle.

"About ready, Delancey?" inquired Captain Barker.

"Yes, sir," Jim replied. "Mike, let's have that mattress. Over here, George, with those discs!"

QUICKLY, Jim sandwiched a thick filling of mattress between two sheets of roughly snipped aluminum

and jammed the whole wad into the gun. He slammed home the breech and screwed on a stout pipe, to the other end of which he coupled his compressed air tank.

"Ready, sir."

"Very good, Delancey."

Captain Barker turned on his heel and rapidly descended to the bridge. In this moment, he was no ordinary liner captain; he was all fighting man.

Even as the Captain arrived at his post, the Chief Gunner's Mate was swiveling the long rifle's turret. Slowly, it revolved, then halted pointing straight astern.

Captain Barker swept up an armful of telephones, scarcely breaking the flow of speech as he lifted each in turn.

"Turret gun, lay on your target . . . Engine room, stand by . . . Quartermaster, stand by to alter course point oh oh one to port."

"On target!"

"Standing by!"

"Ready, sir!"

Captain Barker's face was tense as he almost whispered his next commands.

"Blast off . . . Fire! . . . Blast on! . . . Port your helm!"

The rocket flare winked out; there was a slight cough from the gun, and the rockets flashed on again. TSL "Arcturus" majestically swung her nose a trifle off course. Holding fast to the chart table, bracing himself against the slight turn, Captain Barker heard the chorus of "Done, sir" in his 'phones.

"Steady as she goes, Quartermaster."

Now there was nothing to do but watch the visi-screens. Somewhere, far behind, the slim, black pirate ship was wolfing the miles toward them. Somewhere between, invisible in the darkness, sped the oddest collection of missiles yet hurled in space warfare. On the screen, little showed but the

flaming exhaust of his own ship.

Captain Barker ordered the original course resumed and the screen now caught an angle view of black distance. Only a tiny, brilliant star hundreds of thousands of miles behind showed where the pirate ship approached.

Throughout the whole interior of the "Arcturus," there was no sound. Crew and passengers stared fixedly at their visi-screens, and the clock ticked on.

Could Jim Delancey have looked into his Captain's mind, he would have been shocked—and, perhaps, a little pleased—to find there no trace of fear nor thought of glory. Captain Barker was swearing softly to himself. A higher mind would have recognized the words as prayer—not for himself, but for the people in his ship.

And Delancey himself? He was muttering apologetically that he hoped he hadn't simply made a fool of himself—and that was a prayer, too.

. . . and the miles sped by, and the clock ticked on.

WOULD the crazy scheme work?

If it did, and if that lean marauder were *The Pirate* himself, the whole organization of space wolves would fall apart for lack of competent leadership. Once more, the great liners might follow their routes in safety . . . and, if it didn't—

Only once was the silence broken. A signalman approached.

"Radiogram, sir. The fleet's in sight. The Admiral says—"

"Never mind. Close down your receiver," Captain Barker snapped.

"But, sir, the Admiral—"

"Close down your receiver!"

"Yes, sir."

So the fast battlewagons were coming? But not fast enough. Captain Barker weighed in his mind the relative distance between the "Arcturus"

and the pirate, between both of them and the fleet, at extreme radio range. No, nothing mattered now but a few coins and chair legs, a dozen or so of cookie's pots and pans—all fleeing back into the night of distant space.

When it happened, it seemed a trivial thing, as do most earth-shaking events in their early moments. The flaming star of pirate rockets, now ominously close, winked rapidly, then resumed its steady flare.

"Quartermaster, blast off!"

"Blast off, sir."

The "Arcturus" rushed on in silence, with the long tubes cooling to a dull red.

Captain Barker carefully composed his face, then turned from the screen to the helmsman. He spoke with determination, yet sadly.

"It didn't work, Lieutenant. We'll let them gain on us, then turn and ram them."

The Quartermaster's face turned white, yet he answered evenly.

"Very good, sir. About ten degrees to starboard?"

"When I give the word. Better feed your course into the gyropilot."

"Yes, sir, and the passengers?"

"We have a few minutes. We'll get them away in lifeboats. You and Mr. Andersen will command."

They looked at each other. Both knew that the first lurch of a ten-degree turn would flatten every living creature in the ship against its rigid walls.

"With your permission, sir, I'll stay. The gyro hasn't been working very well lately."

"Damned liar!" thought Captain Barker. "Trying to be a hero! The gyros always work."

Aloud, he kept his voice steady. "I shall be honored by your company, Lieutenant. Signal boats away."

"Yes, sir." The helmsman's hand reached for the alarm button, but his

eyes were on the screen. "Wait!" he cried.

Captain Barker glanced, not to the screen, but out the porthole, as the pirate ship burtled into view off the starboard quarter.

Aye, those pots and pans and chair legs *had* done the job!

EVEN as he watched, the pirate's rockets hurst into erratic fury. Blasting first on one tube, then another, the long, slim ship lifted its tail high and stood an instant on its nose. In that instant, all life aboard smashed out against its bulkheads. Over it went, in a twisting somersault. Then over again. Whirling down the night, like some gigantic pinwheel, the pirate ship crashed past on the exact course which the "Arcturus" had previously followed. All its ports glowed angry red from the consuming fires within.

At the sight, a stir ran through the crew deep in the "Arcturus" forecandle. They knew that Jim Delancey had guessed right. At full speed, the pirate had crashed into this peculiar assortment of junk, snuffing the lives of its navigators at the first puncture of its nose. Even better, some bit of debris had smashed its firing keys, fused the wires, and set off its tubes in a freak pattern never imagined by Jim when he had loaded his "Pop Gun."

Within long, slow moments of its passing, the pirate ship flamed brighter and blew apart in one last exhibition of celestial fireworks. The "Arcturus" crew and passengers slow turned their eyes from the screen to each other. There was no immediate elation—only wonder and relief at their narrow escape.

Captain Barker and Jim Delancey, both, felt this same relief, but they too felt it more keenly, for in this first moment of victory they alone realized that

the star-ways were at last free of terror and sudden death.

A short time after the battle, Captain Barker sent for Delancey.

"Jim," he said, "I hope you're signing on next voyage. There'll be a promotion for you."

For once, Delancey was not wearing his grin. He replied slowly, "No, sir."

"Any reason?"

"Nothing, sir, I could state to the Captain."

Captain Barker flushed, then thoughtfully asked, "If I were not Captain, would you have a reason?"

"All right, sir, man to man," said Delancey, "I will not serve under you again. I'll admit you had a brave and reckless idea, but I don't feel safe on this ship. I believe you know your stuff, but you spend so much time fussing over petty violations you might, some day, overlook something important. When I asked for hard labor, I did it to make you ridiculous. I hoped you'd wake up to being a Captain—instead of a judge. Well, you did improve a lot, but I shan't sign on again. Now, you can log me for insubordination. That's what you've been wanting, isn't it?"

Captain Barker did not reply for a long time. Then he answered, "No, Delancey, I'll not log you . . . and, er, thank you."

Delancey saluted smartly and left.

AS THE "Arcturus" docked, passengers and crew alike were astonished to see a huge crowd break the police cordon and surge across the smoking field toward their ship. Fearing the crush of cheering millions, Captain Barker ordered the ports closed until, a half hour later, space had been cleared for an orderly disembarkation.

Captain Barker approached the gangplank with exultation in his heart.

The radiogram in his pocket gave him a clue to the celebration. It had come from Admiral Williams after the battle and it read: "Swell job! How did you do it? Wish we still had you in the Navy. (Signed) Williams, Commanding Fleet."

Obviously, the Admiral had sent word ahead, and these people were according Captain Barker the triumph he had justly earned. Yet, there was a twinge of doubt in his elation. The winning idea was not, after all, his own. Furthermore, this celebration seemed greater than one battle warranted.

It was not until later, at the dinner tendered to the entire crew, that he learned the full scope of the "Arcturus" victory. The battle fleet had stopped to pick up wreckage and, among it, had found documents proving the long, black ship to have been indeed the flagship of a new pirate squadron. Action upon the information obtained, the fleet had already run down and destroyed the majority of the powerful commerce raiders. Had the "Arcturus" escaped or lost—the brand new marauders would have scattered throughout space. They could have raided at will, always with a headstart on Navy pursuers, and the star-ways would have reverted to the old days when safe arrival of liners was purely a gamble. The "Arcturus" and her men could rightfully claim credit for making space safe again.

* * *

ON SEPTEMBER 14th, at nine P. M. (Rocky Mountain Time), the City of Denver presented such a fantastically beautiful spectacle it seemed a miniature stage setting carved from translucent gems.

It was, however, neither artificial nor small. Above the broad stairs Captain John T. Barker soon must mount, towered a rostrum multiplied many

times from TSL's winged insignia. And, above these clean, white wings—already a mile above sea level—rose tier on tier of slender glass buildings, which lifted their many-bued arms another mile toward the stars.

Captain Barker took in the rose and emerald, sapphire and saffron reflections of countless floodlights in one long glance, then braced himself and slowly mounted toward the dignitaries standing within the sweep of marble wings. This was greater glory than he had imagined in his most secret dreams, and it was all for him!

Attaining the crest of the stairs, he saluted the President with complete outward composure, then stood aside and faced the audience as the President stepped to the microphone.

Dwarfed by comparison with the great spaceport, a million people fanned out beneath him. Throughout the throng, Captain Barker knew, were many televisors trained to carry his face and words to a waiting world. He must look the part. Yet, inside, he shrank until he felt insignificant. The buildings behind him were too great, the crowd too many, and the sky too far above. He was a big man, but he knew that, viewed in this perspective, he was a mere speck in navy blue against the magnificent sweep of the setting designed to focus attention upon himself. The scene was spectacular, but he did not belong.

JIM DELANCEY did not belong, either, and he was as far from the glittering towers of the spaceport as he could get. Oh, not far in distance, perhaps. In fact, he was *in* one of the soaring towers—nine stories down in its basement—at the bar of the "Rocket Blast." And Jim Delancey was scarcely presentable. To be quite frank, he was definitely under the weather as be

downed the fourth-too-many of countless drinks.

"The Rocket Blast" was distinctly not high class, yet it was comfortable place for a spaceman, a place where he might meet his friends in pleasant argument over the merits of this or that new ship.

Jim Delancey still wore his crooked grin, the smile that so highly irritated Captain Barker, but he was in no mood for pleasant argument. Ordinarily, Jim was a popular figure in such resorts, but not tonight. He had had too many drinks to contain his resentment against his superior and all that for which he stood.

He was about to gulp another, when the time came for the ceremony and the proprietor turned on the televisor. Clear in the screen, the President was saying.

"And so, we feel it a rare privilege to stand here this night, on the same platform with that heroic figure of the far-flung star-ways, to shake his hand and realize that we are actually touching, in person, the man who has made those star-ways safe for you and for me, for all the nations of all the planets—the greatest figure in the history of interplanetary flight, Captain John T.—"

"Turn off that 'visor!" Jim Delancey shouted.

"Quiet," muttered his neighbor, "we want to hear."

"Turn it off!"

"Shut up, bud, or we'll throw you out," the other man warned again, balling up his fists.

"Okay, Okay!" said Jim. Scowling into his glass, he subsided.

And the President concluded.

"—by authority of the Congress of the United Nations, and in behalf of a grateful world, we are pleased to present to Captain John T. Barker the highest award ever bestowed upon an

individual of this Earth—the Medal of Orion, with palms!"

In the television screen, Jim Delancey saw his Captain draw his shoulders more erect, heard the sigh of a million indrawn breaths and the thundering, seemingly unceasing applause.

"Pompous son of a so-and-so," he grumbled, staring with fascination as his superior moved to the microphone and made a slight gesture for quiet. "Well, he's got what he wanted, anyway!" He turned to his drink.

Aware that there was still silence, he looked again above the bar, to the shining silver screen.

Captain Barker fingered his collar eagles, his mouth working. Jim wondered what high sounding phrases would issue from it.

After a long moment, John T. Barker of the Terra-Saturn Lines found his voice.

"My friends," he said and paused. "My friends, I do indeed thank you and, in behalf of one who is not present, I accept this great honor."

He hesitated, then spoke again.

"Another man earned this medal. Another man conceived and executed the brilliant strategy for which you have so generously praised me. I accept this medal only by proxy—for the 'Arcturus' crew and especially for James Delancey."

Again the crowd was silent, but not half so silent as one James Delancey for an endless minute. James Delancey, spaceman of the "Arcturus," carefully set his glass on the bar, squared his shoulders and looked from his companions to his Captain, on the screen.

"Well," he remarked, more or less to the group in general, "I don't have to like him—but, by God, he's a *man*!"

Jim Delancey was entirely sober as he headed for TSL's employment office.

THE END

PROTECTIVE COLORATION

Here is how the chameleon performs his quick-change miracle

ALL of us have seen a chameleon change colors; we wonder what the chameleon derives from this. Most animals are not equipped with elaborate devices for defending themselves, being rather fleet of foot and able to escape their pursuers by outrunning them. Even this is not universally true. Not all animals are possessed of such abilities; many are protected by camouflaging themselves, that is, mingling their colors, especially of their coats, with their backgrounds so as to be more or less indistinguishable from it.

Protective coloration in the sense as given above may be properly applied to many animals. Who has not wondered about the coloration of the flounder or the fact that his two eyes are on the same side of his head or that his color resembles that of sand so much? These considerations, accidental or not, are protective, for the less visible the animal is, the less likely to be attacked and destroyed. We have all seen the chameleon change color, brown on brown, green on green, and so forth. We can easily imagine how valuable this is to a chameleon which is being looked for as possible food. We find green caterpillars on green plants, spotted fawns in dense forests, quail beautifully concealed against dead leaves of the forests. One of the prettiest examples of this type of protective coloration is the case of the "walking stick." This animal, green as are its surroundings, is found near the leaves of trees. It not only looks like, but also acts like its surroundings, for it straightens up and looks like a twig, absolutely indistinguishable from the twigs and substance of the bush.

Although the chameleon was mentioned above, there are many other animals which change their colors. This change is not usually so easily made as that of the chameleon. The ptarmigan, for instance, changes its coat seasonally. In the summer time, it blends almost exactly with the woods in which it lives. When winter comes, its coat changes to a snow white. This makes the ptarmigan very difficult to see and so enhances its chances of living out the winter.

A very interesting example of another type of protective coloration with a somewhat different use is the white coat of the polar bear. Now this is not a protection against enemies but rather an aid to the polar bear for living in the cold climate.

It should be told that the polar bear possesses a black coat underneath the white. In physics, the reason for this is told. Suffice it to say that animals which would live in the cold areas must have whiter skins or coats, those which would live in the torrid zones must have black coats or at least dark coats or skins.

This principle has two very interesting applications. Although people are fond of regarding all rats as one and the same, the truth is that the world contains two major types of rats, the black and the gray rat. We of the temperate zones know only the gray rat. No rats are found up north in the very cold areas. But the people of the hot areas know a different rat, only the black rat. Now this is a strange state of affairs, you see, because of the fact that both rats originally came from Europe to North America. It so chances that the black rat was first in Europe. The gray rat was stronger with sharper larger teeth and stronger hind leg muscles. For this reason, the gray rat drove the black rat from Europe to ships and thence to other parts of the world. When they came to North America and the gray rat followed, the black rat was again ousted. Nevertheless, this is just what we would expect. The stronger in a state of Nature kills the weaker. The turning point came when the black rat fled south. Here the great strength of the gray availed him nothing. Beat mercilessly by the hot rays of the sun, he collapsed every time. For, you see, he had no protection against the sun, his coat was not black, his coat was gray.

Now we may smile all we please at this, a pretty animal story. But we human beings are not exempt from the facts in the case. Why are the Caucasian, so-called white people, found only in the north and our brothers with darker pigments in the south. The fact is the fair-skinned people, unless heavily protected from the sun, are unable to survive. Until we could make such protection, it was certain death to be in the hot zones. And even today, most expeditions to the torrid zones will not take extremely fair-skinned people because it will only bring mishap to themselves, and unnecessary trouble to the party. We have taken great pains to learn what Nature has to teach in the matter of color and camouflage, we have still much to learn.



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PAY YOUR OWN WAY TO VICTORY AND PEACE!

PRISON



"Deane . . ." the incredibly fat woman beckoned to the patrolman

BY HENRY NORTON

AN INCREDIBLY fat woman with a painted face leaned over the rail of the loading platform and leered at the Alliance patrolman on the ramp.

"Better come with us, dearie," she called hoarsely. "We could use a few men with life in 'em!"

The guard's face flushed. He was young, and for a second he let himself be tricked into looking upward. One of the men along the rail expectorated accurately, and a howl of laughter went up from the mob in the loading pen. The youngster cursed and clapped his hand to the blaster in his belt.

"Guard!" The voice crackled with command, and the guard came to at-

tention as an officer in the smart blue and silver of the Alliance Corps mounted the incline and came to his side.

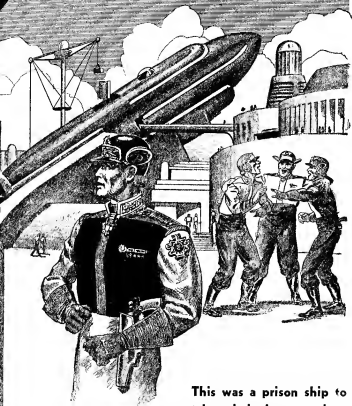
"You're relieved," Captain Shattuck said.

"Yes, sir," said the guard, and in a lower tone he added, "The lousy scum. We'd ought to blast them all."

"You asked for it, lad," said Shattuck. He saw the guard safely down off the ramp, before he turned to fill the missing post in the circle of blue-clad figures.

Captain Shattuck of the World Alliance Space Corps stood six-foot-three against the steel outline of North Dakota Port. He stood with the erect

IN SPACE



This was a prison ship to take criminals to a prison planet--but enroute something happened that changed the order of things just a trifle!

ease of his untiring twenty-five years. His face was tanned to a leathery brown, and his blue eyes were deep-set, and bordered by the squinting lines that mark the face of any voyaging man. The hash marks on his sleeve said he was in his fifth year of service, and the fact he was a captain before thirty said the service had been exceptional.

Behind him, on the mile-square loading platform, milled the wildest, motliest collection of humanity in the history of the port. The rail was lined with them, jeering at the guards, or sunk in apathetic gloom. Men and women, young and old, villainous or mild—these were the thousand persons condemned by the Council to exile on Venus. A few of them were murderers, some were sahoteurs, a handful had been merely unwise in their criticism of the Alliance. Their personal effects, a mountain of luggage, now stowed the hold of the space ship *Vigilant*.

Shattuck watched the confusion idly, offering no response to repeated efforts from the rail to distract him. He looked at the scene with the same detachment he would have had for a round-up of cattle. His orders had been to serve as first officer to Commander Goelet in delivering a cargo to Venus. That the cargo was live made no difference.

The *Vigilant* gleamed silver in the sunlight, towering vast above the cradle in which it lay. It was one of the new freighters, built huge and blocky, able to bring a mountain of dianium from the moon, or a million tons of radioactive salts from Mars. It had been hastily converted to provide living quarters in the middle third of the ship. The forward hold would be stocked with food, the stern with the luggage of a thousand exiles.

It was the *Vigilant's*—and Shattuck's—second such expedition to Venus. A

year before, the Council of the Alliance had been faced with a growing number of revolutionaries. It had then decreed the sequestration of a thousand men and women on Venus, and the sentence had been duly carried out.

DOUGLAS McA. SHATTUCK had been a lieutenant on that earlier trip. He could still, in his most unwelcome dreams, remember Venus. The dank steaming soil, lying forever shadowed beneath the tumbling clouds that were horn of a blazing sun's caress on the face of a raw and watery world.

Much of the old, familiar pattern of creation was being worked out on Venus, only a little altered by the planet's nearness to the sun. The mountains soared in jagged, sharp majesty, forever veiled in mist, above the flat mud plains. Huge fernlike forests covered the lower slopes, and gave a home to gibbering ape-like animals, brilliant scaly birds, and a multitude of insects. Only in the deep swamps had any sign of intelligent life come into being, a shy, reptilian life that had as yet been most unsatisfactorily observed.

Perhaps the World Alliance was justified in considering Venus a subject for their own uses. They, of all the life in the solar system, had mastered space travel. They had placed a hard-won, hard-kept outpost on Mars, and the sunrise band of the moon was being peopled by a brawling, raffish crew that acknowledged no man as master. And Earth itself was turning all its vast creative powers into the World Alliance technology.

In one project that technology had failed. It had failed to find or develop human food on Venus. Seeds and grains rotted in the ground. And the native plants and animals had proved to be no food at all. The chemists reported

them nourishing, and their taste was strange but not unpleasant. But within minutes after swallowing them, Earth folk became violently ill.

That was why a third of the ship was being stocked with highly concentrated food for the exiles on Venus. Food for this cargo, and for the first load—it took a lot.

Shattuck could still remember the Venus blast-off last year, the forlorn, instinctive huddling of the exiles as the space ship left. They had remained for a time a crawling, fungoid patch on the face of Venus, with the mountain of provisions towering beside them till the relentless mists closed in and shut them from view.

Now it was to be done again, and he felt a nameless stir of feeling for that brawling, noisy mob on the loading platform. He studied them idly, wondering what had been their individual crimes to earn isolation from Earth. The fat woman he knew was Stella Marvel. She had kept a great, rambling house in the capital city of Chicago—a house in which the Council said she had harbored spies and malcontents. The suspicion was there had been a gayer, more frivolous aspect to Stella's menage—two or three of the hard-eyed girls being sent to Venus with her bore out the theory.

THE black-bearded giant who had impaled the guard was Jack Coventry. About his inclusion in the thousand there could be no dispute, for Coventry had organized a mob in Rio to storm the Alliance headquarters—and had almost made his gamble good before the flame guns could swing into action.

There were others whom Shattuck did not know. A frail old man with a wiry gray beard sat on a little box in the middle of the tumult, scribbling in

a notebook. A red-haired, freckled whip of a fellow who stood a little apart, surveying the scene abstractedly. A turbaned Sikh, who bent down at intervals to whisper to a nervous, white-faced Middle-European.

The drone of Shattuck's personal radiophone broke into his musings, and he opened the watch-sized instrument on his belt. "Captain Shattuck," he acknowledged.

Commander Goelet's voice came through. "We're stowed, Mister," he said. "Start loading the rabble. We'll be wanting to blast at 17:30."

"Right, sir," Shattuck said. The connection snapped.

Shattuck punched the five-letter key into his 'phone that called the Port Commissar. The 'phone made possible instant inter-communication among more than a billion persons, in any part of the earth. It contained a tiny receiver and transmitter, and to each person who carried one was assigned a sequence of five letters that was his life-long personal call. The Port Commissar was one of the easily remembered and unfortunate persons whose call-letters spelled a word.

"Port Commissar," he acknowledged.

"Hello, Twirp," said Shattuck cheerfully. "Sound 'shipboard' for this mob. We're Venus-bound!"

The brazen cry of bugles split the air across the loading platform, and the humanity of the exiles stirred and began to jell into a twisting queue, feeding into the middle hold of the *Vigilant*. For the most part they went impassively, but a few twisted back and craned their necks for a parting glimpse of the earth, a final look at the sun. Under the eternal overcast of Venus, there is no sunlight—only the cloudy day, and the Stygian night. The thought made Shattuck glance at his sun-thrown shadow with a sudden new interest, and

a feeling dangerously near to pity moved within him.

When he looked again, the lines had shortened measureably. Loading the passengers now was a matter of minutes, and down the slanting skyway he could see the scout ship bringing Randolph Goelet to his command. There remained now but the minutiae of embarkation. Then for the crew, Venus and return. For the thousand in the middle hold, Venus—and exile!

THEY were midway on their voyage, four hundred hours from Earth, when trouble struck. It came with the clanging of an alarm bell in the control room, and the urgent flashing of a red light over the door to the passenger hold. Air was escaping!

No orders were necessary, even if there had been time to listen. This was the ultimate emergency, the one against which every space man is schooled constantly from the start of his service to the very end. Shattuck led the three man jury-squad through the airlocked door to the middle hold, with the life of the ship depending on his skill and precision.

They found the pinpoint break at once, a bright gouge into the bull metal back of a bulkhead. One of the crew laid the plastic patch across it, and while the patch was held there by the sucking mouth of space, Shattuck and the other man started the spray gun, sealing the patch in place with a fine spray that turned knife-hard as it struck. In a few seconds the break was mended—but in that flicker of time, ten of the passengers were dead.

One of Stella Marvel's girls was dead, with a bloody froth on her lips. The white-faced European was dead, but his face was no longer white. It was covered with a crimson dew, where the blood had come through his skin in the

first kiss of airless space. And in the survivors there was none who had not felt the nearness of death. Some were pallid and shaking with space-shock—others doubled in agony as the air in bellies suddenly expanded was now being slowly compressed back to normal.

Into the shambles came Goelet, murderous fury riding like a stormcloud around his handsome, sharp-cut features. He bowled the passengers aside like skittles as he charged across the room to glare at the break.

"That's a ray cut," he snapped. "Look at the fused metal!"

"Begging the Commander's pardon," said Shattuck, "but it couldn't be. It would take heavy equipment to make a ray cut in one of these hulls. And the passengers were searched by autoguard as they boarded the ship."

"You've let something slip by, Mister," said Goelet.

Malvern, the second mate, spoke:

"Professor Carter's on board, sir."

Goelet's face darkened. "Where is he?"

"Here I am," said a voice.

It was the frail old fellow with the gray beard. He clutched the little box in his arm, and clung for support to the arm of a girl beside him. A very pretty girl, Shattuck decided at once.

"What's the box?" the Commander snapped.

Professor Carter smiled faintly. "It's a new atomic ray gun," he said. "It's made of plastics. That's why it didn't register on the autoguard."

"Did you cut the hull?"

"Why, yes," the old man answered. "I considered we'd be better off dead than exiled on Venus."

GOELET'S face went brick-red. "Put him in irons," he told Malvern in a strangled voice. "Shattuck, destroy the box!"

"Hadr't we better examine it for value, sir?" Captain Shattuck began. "There may be something the Alliance could . . ."

"Captain Shattuck," the Commander said icily, "you've volunteered your opinion twice now. Follow orders!"

"Yes, sir," Doug Shattuck said dully. There was a snicker from among the crowd of prisoners.

"Any more disturbance," Commander Goelet told them, "and I'll have the entire group gassed for the duration of the voyage."

He left the hold with the crew men and Professor Carter. Captain Shattuck turned to the black box, conscious of the ring of passengers pressing around him. "Alleycat!" A man in the back of the crowd yelled the hated nickname for the Corps. The prisoners were in a rough and dangerous mood. Someone jostled his arm as he bent to pick up the box.

"Did the nasty old Commander give precious a working-over?" cooed a deep bass at his elbow.

"Aw, let him alone!" It sounded like Stella's voice, but it went unheeded. A stronger push threatened to send him sprawling, and Doug Shattuck straightened up to look at his tormenter. It was Coventry.

"Looking for trouble?" Doug asked.

"I make my own," said Coventry.

Doug Shattuck grinned. He took off his soft cap and stuck it in his pocket, hiding the insignia of the Alliance. It was a plainer challenge that words, and Jack Coventry's eyes lighted savagely as he came in.

The black giant's huge fist whistled past Doug's ear as the space man slipped easily under the opening blow. He drove two sharp punches to Coventry's ribs, then came forward on his toes with all his weight behind a savage smash to the jaw. Coventry went back

on his heels, and his eyes rolled loosely. Shattuck measured him carefully and started another looping blow. Then a kick caught him in the back of the knee, and he floundered back. Coventry's punch had already started, and it landed with enough force to drive Doug's head to the floor with a clang. Stars burst in front of his eyes, then he was on his feet and weaving groggily toward the black giant.

COVENTRY stopped him with an outstretched arm.

"It's off, Captain," he said. "If I can't down a man fair, I won't down him at all. 'Twould have been a good scrap if that scum hadn't interfered."

"What happened?" Doug asked thickly.

He followed Coventry's gesture. The turbaned Sikh had one great arm locked around the red-haired man's neck—was choking him as easily as if he were a child.

"Red Farrow tripped you."

Shattuck jerked at the huge Asiatic's arm. For a moment the Sikh stared defiantly, then loosed his grip and let the red-head slip to the floor. He looked puzzled.

"Does not the sahib want him killed?"

"I do not."

"His was a coward's blow."

"Let him alone. There's enough of you dead now."

"They're the lucky ones," said a girl's voice.

It was the girl who had stood by Professor Carter, and Shattuck thought he had never seen a face at once so lovely and so desperate. Red gold hair was a nimbus about her strong, fine face, and the snug jerkin and shorts she wore did little to disguise a figure that was strong, yet alluringly molded. Just now her eyes were hot and glowing,

and her lips were caught into a thin scarlet thread.

"They'll be a long time dead," said Shattuck.

"That's better than a life in prison."

"After Stella Marvel's house, I should think a nice respectable prison would be a treat," Shattuck said.

He picked up the black box and went to the sliding door of the middle hold. He turned and looked at Jack Coventry.

"Keep your playmates in line till we land," he said. "You'll need all the fight you've got on Venus."

SPARKS had been hammering the transmitter of his ship radio for a half hour before he turned to Goelet and said, quite unnecessarily, "Can't raise 'em, sir."

They hovered over the tumbling gray veil of the planet, reluctant to plunge down into the smother until a call had come up from the directional radio of the first colony. There were too many things that could happen to a ship landing blindly. The jagged spars of the mountains were thirty and forty miles high in the mist, for one thing. And there were uncharted parts of Venus that could provide an effective death trap. Goelet frowned thoughtfully.

"They're probably all dead," he said at last. "We'll go in for a landing here."

Doug Shattuck knew he should keep his mouth shut, and he tried to. But the words escaped him—got out of their own volition.

"How about the food for the others, sir?"

The Commander's face was a dirty white, and his heavy brows made a straight black mark across his forehead. He turned to stare at Shattuck for a moment, and his eyes were bleak and merciless.

"Mister," he said, "this is the third time you've talked out of turn. I fail to understand how you ever became an officer in the Corps."

"Begging the Commander's pardon," Shattuck said, "but this is the first command I've seen where it was necessary to speak out of turn. Our orders were to land these people safely, with the first contingent."

"It seems to me, Mister, that you're a good deal more concerned with this rebellious mob than you are in your duty to the Alliance. I'm inclined to believe you're in sympathy with the lot of them."

"There's no reason to starve them, just . . ."

"That's enough, Captain Shattuck."

The two men searched each other's face. Goelet's arrogant eyes were chips of glacial ice; Shattuck felt his face slowly turning scarlet. The Corps was his life, and Goelet's rank merited the deepest respect. Shattuck knew he had made his position bad. He proceeded to make it worse.

"I feel it only fair to warn the Commander, sir, that I consider it my duty to report . . ."

"Silence!" roared Goelet.

Doug Shattuck's back was toward the control board. He did not see the flashing lights that told of a landfall.

"Don't try to shout me down!" he snapped.

Malvern shouted hoarsely from the door of the control room, "We're landing!"

Shattuck flashed a startled look behind him, and leaped for the controls. Goelet's fist struck him behind the jaw. He sprawled forward, and Goelet stepped over him to the controls. His voice came down to Shattuck in a slow fade toward unconsciousness.

"Confine him to quarters, Malvern, if we land."

DOUG SHATTUCK opened his eyes and blinked at the watery daylight that streamed across his face. Every nerve in his body felt for the engine throb that had been a constant companion for the past thirty-four days. It was silenced. The air he breathed was no longer the somewhat antiseptic smelling product of the ship's rectifiers—it was the sultry, steamy atmosphere of Venus.

He got up slowly from his bunk, feeling a moment's lift as his muscles pressed powerfully against the faintly lighter gravity of the second planet. He was in his own cabin, and the door was open. Doug knew he was probably confined to quarters, but he reflected that he had never actually been given an order to that effect. He felt for his sidearm, and found it in place. He went out of the little cubicle into the corridor of the ship.

Officer's quarters were back of the forward control room, and back of that lay the huge forward hold where had been stored a year's supply of food for the thousand new exiles and the thousand of a year before. The sliding door to the cavernous interior was open, and Doug saw the food had been half unloaded. He started down the ramp to the ground, and the autoguard clucked as it registered the passing of his blaster.

The passengers were all unloaded. They did not stray as a similar landing party would in familiar terrain. They stood huddled together, close beside the huge mound of cargo. Shattuck thought they would look almost exactly like the first exiles had, when seen from the departing ship.

Commander Goelet watched him approach.

"You could have saved yourself a walk, Shattuck," he said dryly. "We're ready to blast off, and you'll spend the

return trip in your quarters."

"What does the Commander mean, we're ready to blast off? The food's only half unloaded."

The fringe of the crowd nearest to the officers had stopped all speech and motion. Shattuck saw Jack Coventry make a quick motion with his hand, and several of the exiles gathered around him. Malvern had stepped to the Commander's elbow. His hand was hooked in his belt above his blaster.

"We've unloaded food for one thousand," said Goelet. "The first party is assumed to have perished."

"You mean you're not going to try to find them? Not even going to leave their food in case the new party finds them? Sir, it's murder!"

"Give 'im hell, Shattuck," roared Coventry.

COMMANDER GOELET walked to Shattuck and jerked the insignia of the Space Corps from his cap. His words were furred with anger.

"Since you're so interested in these rebels, you may join them, Shattuck! I'll not have you on my ship!"

An uneasy movement ran through the crowd, and the guards fingered their guns. Shattuck stood at attention. His world was toppling down around him, but not for anything would be let it show in his face.

The Commander turned to Malvern. "Shipboard," he said. A whistle shrilled, and the crew went into the ship, the guard line hacking slowly. The ramp clattered in. Shattuck heard the great motors begin their throb.

The composure of the exiles went then, as realization sawed across their nerves. Their whispering was the voice of fear, of people millions of miles from home on a strange and unknown world. They began to break, to stream toward the closing port.

"Stand back!" Shattuck shouted.

His blaster jumped to his hand as he sprang to put his back to the closing entrance of the ship. And it was the shock of surprise as much as the menace of the weapon that broke the oncoming wave. For a moment they hesitated, and in that moment the voice of the engines swelled to a star-shaking song of triumph, and the *Vigilant* went aloft.

I know how we look from the ship, thought Shattuck. A little crawling black spot, beside a mountain of cargo. A little fungoid patch, lost in the mists of Venus.

He put his gun back into its holster, and stood watching the crowd until the down-tipping faces told him the ship was out of sight. What would happen now, he didn't know. He didn't care.

"You've got guts, boy!" called Stella Marvel.

"Welcome to jail," said Coventry.

Doug Shattuck said, "Oh, go to hell."

He turned and walked blindly away.

"WELL, kid, the first six months are gone."

Jack Coventry turned from the chart to grin at Doug Shattuck. He'd rigged up a complicated ratio for scaling the time to terms of Earth days. Now the sprawl of marking had gone half across the sheet.

"Okay, so they're gone," Shattuck said.

Coventry sat on the edge of his bunk and rolled a cigarette. He coughed a little as the rank weed bit his throat.

"Look, Doug, why don't you snap out of it?"

"I'm okay," said Shattuck.

"You're crazy," said Coventry. "You're eatin' your damn' heart out because you got bumped out of the Corps. It's the best thing that ever happened to you."

Shattuck rolled over and stared at

the smooth plastic wall of their little cabin. Here we go again, he thought, the same old argument, over and over. Jack was a good guy, but he didn't—couldn't know how it felt to have a man's career blow up in a single unguarded moment.

"Don't you realize the whole Alliance, the whole Space Corps has gone rotten, guy? What do you want to be, another Goelet?"

"Goelet was within his rights," Doug said. "And if he wasn't, he still isn't the whole Alliance."

"Oh, you and your big fat Alliance!"

"There hasn't been a war on earth since the Alliance was formed," Shattuck argued.

"Isn't that dandy?" jeered Coventry. "No war! Why, for hell's sake, how can you have war in a world of slaves. A cartel of big shots form a Council of Alliance that makes every living soul on earth a powerless pawn. They build a squad of armed bullies—no offense, kid, but that's what the Corps is—to keep the people kicked into line. And then you feel good because there aren't any wars!"

The black-bearded giant got up to answer a knock on the door, and feinted vigorously at a chair in passing. Professor Carter slipped in and went straight to the room-cooler by the window.

"Got an idea," he said by way of greeting.

Shattuck nodded absently, and returned to the attack. "People had enough to eat, Jack. They had clothing, and houses, and darn little work to do. For the first time in history, everybody in the world had the necessities of life. What else could they want?"

"What else did you want, Pop?" Jack asked softly.

Professor Carter rocked back on his

heels and looked up almost shyly. "Excuse me," he said. "I'm afraid I wasn't listening."

"Why'd you join the revolution?"

Professor Carter studied the tool in his hand, a slender tube-like affair with a claw on the end that worked as deftly as a human hand, and was operated from the handle. It was his own invention.

"I guess it was just that I didn't want to be told what to do and when to do it," he said. "I thought I could accomplish more by myself."

"There's your answer," said Coventry.

"This cooler's better now," said the Professor. "It'll keep you comfortable now at half-power."

HE went out of the cabin, and both men were silent for a moment. The gentle Professor, in their six months on Venus, had created a city. Using Doug's blaster as a primary source of power, he had tapped the resources of the planet to make building material, machinery, clothing, furniture—an entire technology done in plastics.

"He'd have been a genius anywhere," said Shattuck.

"The Alliance had him in a toy factory."

A second knock sounded at the door. Doug pulled it open. "Hello," he said. "Come in, Miss Carter."

"No, thank you," said Myra Carter. "I'm looking for father."

"He was just here. Won't you come in and . . ."

She turned away. "No, thank you."

"I don't think she likes me," Doug Shattuck said.

Coventry laughed. "Why should she? The first time you spoke to her you practically called her a . . . you as much as said she was one of Stella's girls."

Doug's face got red. "How was I to know? Girls all look alike to me."

"That's enough to make her mad, right there!"

"Well, dammit, she's a swell girl, but I'm not going to worry about it if she doesn't like me. I've got other things on my mind. We've got to find that other camp, or what's left of it. That's plenty to keep me busy, without letting some red-haired gal . . . Jack, you big ape, what are you grinning about!"

THEY found the other camp in the eleventh month. They found it by pure chance. Sindra Lal had led a party into a mountain range about a hundred kilos away, in search of a calcium deposit. They found the calcium a narrow ledge of ancient sea-coast high in the peaks. While they were taking it out, they saw the flashing pin-point of light, far down a distant valley.

There were fewer than two hundred alive out of the original one thousand. They made no effort to greet the rescue group that Coventry led into their camp. The reason was not a lack of joy at seeing human beings. That joy spoke eloquently in feverish eyes and in the prayers that mumbled through cracked, drawn lips.

"My God, they're all sick," said Coventry.

"No, sahib," said Sindra Lal. "They are starved."

It was as simple as that. The mountain of food had lasted the year. When it was gone, it had become a dogged fight for survival, a fight in which only the strongest had a chance to win. Seven more died on the day the rescue party arrived.

It took a week to move the survivors to Fort Two. Jack Coventry stood with Doug Shattuck, cursing steadily as the big mud-sleds came in, pulled by Carter's new and effective atomic trac-

tors. His deep voice growled through his beard as he counted them in.

"Langlie's gone, and Pierre Durand, and Chang Klan, and Mrs. Witherow—the greatest political minds of the century. Starved by that murderer Goelet! By God he'll pay for this!"

"Goelet was following orders," Doug said.

"Don't be such a dope," Coventry said wearily. "Goelet took that food away from here to sell to the moon colony. He pockets the dough, and eight hundred people starve on Venus."

"He wouldn't!"

"That's your world Alliance for you," Jack said.

Doug shook his head. "Paul Wainwright's on the Council, and Gottschalk. They're good men."

"Maybe so, but they're exceptions. Most are just like Goelet—out for what they can get, and the public be damned."

"They can't be as bad as all that. They'd have shot you all down without a chance."

"They were afraid to kill us," said Coventry. "A death sentence would have set the whole powder keg afire, and they knew it. So they give us slow death, here."

"If I could be sure Goelet sold that food on the Moon . . ."

"Be sure of this," Coventry said. "If the ship is late, there'll be starvation again. And we'll be doing it!"

WHEN the pinch of famine threatened, Doug wanted to cut the rations of the able-bodied men and women, and try to keep the weaker ones alive. Jack Coventry thought otherwise.

"We can't all make it, Doug," he said. "Better give the ones with the strength a better chance to pull through. The weak ones'll go anyway."

"That sounds good, coming from you," said Doug. "You've been giving half your ration to those poor devils from Port One."

"I think the ship'll come," said Stella Marvel.

She was in charge of commissary, and the three were talking in the huge supply shed. The walls were almost all exposed now. Only in one corner was there still a pile of the powdered and condensed food from the *Vigilant*. Enough perhaps for another week of full rations for all—enough for a month if allotments were cut now.

"Don't tell me you trust the Alliance," Doug said.

"Hell no," boomed Stella. She laughed, and her folds of flesh jiggled spasmodically. "What I think is, they'll have to send another load of exiles. Things ought to be pretty hot by now."

"How'd Carter ever make out on his synthetics?" Doug asked. "Any hope on that score?"

Coventry looked at him quickly and glanced away.

"You haven't been around the Professor's lately?"

"I'm not too welcome," Shattuck reminded him.

"Let's walk over there now," said Coventry.

Stella Marvel puffed along between them as they sauntered down the single street of Port Two. Some of the little cabins had pale native vines growing over them now, and Venusian blossoms in the yards. Shattuck noticed absently that all the faces now were uniformly white and clear. In the absence of direct sunlight, there was almost no pigmentation in the skin.

Myra Carter opened the door for them, and led them through the house to the Professor's shop in back. There was another man with Carter. Red

Farrow, the man who had tripped Doug in the ship, and had been nearly killed by Sindra Lal. He gave Shattuck a glare of hostility, and did not speak.

"How's it coming, Pop?" asked Coventry.

"Wait a minute," said Farrow. "Are you going to talk in front of the stool pigeon here?" He jerked his thumb at Shattuck.

"For God's sake, Red, be sensible," said Stella.

"I am," said Farrow. "The rest of you can fall for that story about him being broke from the Corps if you want to. They planted him here as a spy."

"How'd you like a throatful of teeth?" Doug said.

"If you two want to brawl, go outside!" said Myra.

Red scowled angrily, but made no move, and Doug turned to the girl.

"Okay," he said, "but keep your lap-dog quiet, or I'll housebreak him!"

Crimson stained the girl's cheeks, and she slammed the door as she went back into the house.

"How do you always manage to think of the wrong thing to say?" whispered Coventry.

PROFESSOR CARTER was talking brightly, oblivious to the currents of conflict around him.

"I got the idea from the way ship engines always blank out at the Heavyside-Kennelly layer," he said. "This is an ion gun. It will stop any electric motor."

Doug Shattuck stared in stupefaction at the shining barrel of the weapon. He turned to Coventry.

"You're going to attack the Alliance ship?"

"Correct as hell," said Coventry.

"Well, of all the screwball ideas!"

"What'd I tell you?" demanded Red Farrow.

"What's wrong with the idea?" asked Coventry.

"First off, if you should knock the ship down, you'll kill a thousand innocent people. Maybe ruin the food cargo that's our only chance to stay alive another year on Venus."

"That reminds me," said Professor Carter. "I . . ."

"Wait a minute, Pop," said Coventry. "Doug, suppose we take the ship after she lands?"

"That's another thing. Suppose it isn't the *Vigilant* this trip? Suppose it's a new ship—one your little plaything here won't bother? You don't think the Corps has been sitting around all year contemplating its navy?"

"Maybe you got something there, kid." Coventry shut his eyes a moment, then opened them and grinned. "We'll wait till the crew disembarks, then rush 'em."

"Unless Shattuck warns 'em first," said Farrow.

Doug came round slowly, and his face was grim.

"You've been asking for this," he said.

The fight was brief but interesting. Red Farrow had reach, and an agile wariness about him that marked Doug's face a few times. But Doug Shattuck had the muscles of a gladiator, and a burning anger that subsided only when Red slumped back against the laboratory wall and refused to get up again.

Doug leaned back against the Professor's ion gun, his bruised hands grateful for the coolness of the metal on their palms. He looked up from Farrow, directly into the face of Myra Carter. For a second her face was alight, almost admiring. Then the blank wall of dislike was set again across her eyes.

"If you thugs are finished," said Myra Carter, "will you please get out

and let father work? The ship is due two days from now."

THE ship arrived on schedule, but it was not the *Vigilant*. It was a slim black cruiser, knifing down through the clouds along the radio beam. It settled, and Doug's eyes burned at the lethal beauty of its trim hull. It was heavily armed, and the black of the hull was not the black of metal, but a dull, absorbent black that made the sinister craft look like a shadow across the landing field, where no shadow could ever fall.

Jack Coventry, Carter and Shattuck watched a port roll back and a ramp come licking out, like a long black tongue.

"Looks like neoplast," said Carter.

"Is that good?" Coventry asked.

"Using an ion gun on that stuff would be like throwing rocks at Fort Florida," said Shattuck.

"It's that plastic I developed at the toy factory," the professor explained. "Made little statues of that comic-strip character out of it. You know, Hyperman. We had a standing offer of five hundred units to anyone who could melt or break one of the statues."

"Cheap way to buy research," said Shattuck.

"Well, it's lucky we had an alternate plan," said Coventry. "Let's go meet the visiting firemen."

The loading ramp was guarded now, and Doug felt a quick shiver at sight of the silver and blue of the uniforms. He looked through the crowd for a glimpse of Goelet, but he could see no one whose stripes marked him higher than lieutenant commander. He edged toward the officer who wore them.

"Where's Goelet?" he called.

The officer turned. "That you, Shattuck?"

"Malvern!"

Doug Shattuck accepted the outstretched hand, and Malvern eyed him shrewdly.

"You look fit," he said finally.

"What's the news?" asked Doug.

"Not much," said Malvern. "Want your job back?"

Shattuck's heart began to pound uncomfortably. Did he want his job back? Did a caged bird long for the thrust of wings against the upper air? Did a trapped animal dream of the shadowed jungle runways? The silver comets on Malvern's cap seemed for a moment to shine with an inner radiance of their own.

Across the runway he saw Jack Coventry, Red Farrow and Sindra Lal standing together. Coventry was looking at him, and Doug saw an expression of puzzlement on the black giant's face. Red Farrow leaned forward and said something to the Sikh, and Sindra Lal nodded.

"You think there's a chance?" asked Shattuck.

"With your record in tactics? Sure!"

"Tactics! Is there fighting?"

A JUNIOR came out of the ship hastily, and called to Malvern. The lieutenant commander went toward him, and there was a moment of low-voiced colloquy. In that moment, the prisoners began coming from the ship.

Doug's jaw dropped in amazement. The first man to come out on the ramp was tall, slender, and his white hair stood about his head like a halo. He looked to neither side, but strode down the ramp as if he were going to his own coronation.

"Gottschalk!" shouted Doug, and ran to meet him.

The man stopped, and his blue eyes searched for the person who had called. He peered at Shattuck. "Is that you, Douglas?" he said.

"For God's sake, sir, what are you doing on a prison ship?" asked Shattuck.

Gottschalk smiled. "Can't a Council member be a revolutionary if he wants to? There are seven of us on board the *Vega*."

"But for . . . what's happening?"

The old man's face went grave. "It's hell," he said. "Goelet is supreme commander of the armed forces, and he and four of the Council have seized power. They want a world dictatorship in name as well as in fact. We put up what resistance we could. Wainwright's in Asia now, trying to get a force together."

"Has he got a chance?"

"Not so good, Douglas. The devils were clever, and thorough. They brought in mercenaries from the Moon, and the loyal part of the Corps was just about wiped out."

The rest of his words were lost in a crash of thunder from the cruiser. The forward gun turret was in action, and the rush of air toward the atomic blast almost swept Shattuck from his feet. He twisted to look behind him, half-knowing what he would see. The long shed back of Professor Carter's house was a smoking wreck of fused metal and shattered plastic.

And now rose another thunder, the sullen wave of anger from the thousand exiles massed beside the ship. A bright hard core within the swirl of sound was Farrow's scream, "Shattuck, you traitor!" The forefront struck against the ramp with the shock of heavy bodies. The guards were swept under, and Doug Shattuck saw Coventry coming on in the front line of attack. There was hard anger, and the joy of battle in his face, but there was hatred too. Then Shattuck went down into the press of bodies, and he heard Sindra Lal's soft whisper:

"Lie still, sahiih, or you die!"

The storm was over him, and past. In the aching moment while he waited for the roar of the atomic cannon, he heard Malvern shouting in hoarse rage. He heard a note of triumph come into Coventry's great voice. Then one of the trampling feet around him caught his temple, and he heard no more.

HIS senses returned like the flicking on of a light. He lay quiet, not daring to move nor to believe in reality. For Myra Carter was beside him, sponging his face. Her eyes were red-ringed and her lips were trembling, but her voice was even when he opened his eyes.

"Don't try to get up yet. You're all right."

Shattuck licked his dry lips and swallowed. He shaped the words, "What happened?"

"Father's dead," said Myra. "He was in the lab when they shelled it. The men think you told Malvern about the gun."

"Did your dad think that?"

He searched her face for the answer. It was somehow awfully important, that answer.

She shook her head. "We just forgot the ship would have autoguards," she said. They located the gun. Dad was on his way to shield it when they opened fire."

"Did we take the ship?"

"Yes, we took the ship," Myra answered, and scorn mounted in her voice. "What good is it? Where can we go?"

Doug thought about that. "Back to earth?"

"On a captured Alliance ship?"

"That's right, we couldn't do that. Maybe we could find a planet that had food on it, anyway."

"Doug, no one else knows this," Myra said, "but father made an im-

portant discovery just before he started building the ion gun."

Shattuck tried to sit up. She'd called him "Doug!" Myra pushed him back against the pillow.

"It was about the food on Venus."

"Yeah, he was looking for synthetics," Doug said.

"More than that. He found out that some of the first colony had been eating native roots, and didn't get sick."

"They had a tough time."

"Doug, you don't understand." There, she did it again! "They lived on native plants—got nourishment from them."

"You mean the foods on Venus actually agree with some people? Why, that would . . ."

"They agree with anybody! It's just a matter of acclimatization. There's something lacking in the plants and animals and everything—Dad thought it was caused by the absence of direct sunlight. But after an Earth person's been here about a year, they get conditioned to whatever it is. They can eat anything."

"Then those people needn't have starved!"

"But they didn't know! Now we do know, and nobody ever needs to starve on Venus. People can come here to live, and bring their first year's food. There can be homes on Venus."

That brought up another idea. "You just called me 'Doug.' I thought you hated my . . . insides."

"I guess I did, for a while."

JACK COVENTRY entered without knocking. There was a red slash across his forehead, giving him more than ever the appearance of a Fifteenth Century pirate. His eyes were frosty.

"Is he okay?" he asked Myra.

"I can talk, you know," said Shattuck.

"How well I know!" Coventry said.

"I didn't tell Malvern anything!"

Doug flared.

"That can wait," said Coventry.

"We've got the *Vega*. Can you fly 'er?"

"I can fly anything," Shattuck said.

"Can you fight 'er?"

"Against what?"

"We just got the radio working," said Coventry. "There's another warship stratoside."

"I can fight 'er," Shattuck said.

They went out into the steaming street, onto the mud that was never completely dry, and Doug Shattuck paused a moment, drawing a deep breath. "We'll call this Carter City from now on," he said. Jack Coventry looked at him in surprise, and they walked the rest of the way to the ship in silence.

She was a lovely fighting craft, with controls as sensitive as finger-ends. Shattuck disposed his crew, and pressed the "Clearing" button, hearing the rising whine of the engines as the port went shut. He brought the drive motors to a dull thunder, and took her skyward in a snarling climb.

They went out of the Venus cloud envelope, and the colonists gasped as the pinpoint radiances of space met eyes conditioned to eternal mist. Jack Coventry's voice came through the ship system from the after gun pit.

"Get it over fast, Doug. These lights are tough."

Then Sindra Lal touched Doug's arm, pointing.

"The other ship, sahib."

SHE was bigger than the *Vega*, and she came with the silent speed of a lightning lick, slanting down out of the sun. A white streak of fire blossomed from her snout, and the *Vega* bucked and pitched as Shattuck fought the controls. He lanced a flame from his fore-

ward cannon and watched it die in the intervening space.

"They've got us outreached," he said dryly.

"The sahib has beaten those odds before," Sindra Lal said.

"It can be done," said Shattuck.

He kicked the *Vega* sideways, and coasted toward the enemy ship broadside. It was a desperate venture, for it gave a generous target. But it gave more fire power too, and in seconds his guns could reach their mark.

"Now, Jack," he said.

"Now it is," said Coventry.

The *Vega* shuddered, and her grim guns filled the void with fire. Shattuck saw the broadside go home, and the heavy cruiser in the gunsight went end over end. A white scar grew on her slanting prow, and Shattuck knew he could break her open with another hit.

"Nice shooting, Malvern," said a husky voice in the radio. "I underestimated you."

"Retract your guns," said Shattuck, "or we'll blow you out of the sky."

"Maybe you will," the husky voice admitted. "But it won't do you any good. The Alliance is dead."

"Some of it will be, anyway, as soon as I get you in my sights again."

"You're not Malvern," said the voice. "I didn't think he was that good a battlemaster. Who are you?"

"Ex-captain Shattuck, and hold everything!" Doug brought the *Vega* into a soaring orbit with the other ship, and hovered to sunward. "Why would you be firing on Malvern's ship? Talk fast, Mister!"

"Shattuck, by all that's holy! Wait a minute!"

Another voice came on the radio, a calm, crisp voice Doug knew at once. "This is Wainwright, Shattuck. Did Gottschalk arrive safely?"

"He's on board now," said Doug.

"Tell him we've won, Shattuck! The Alliance is finished on Earth. This ship was sent to capture Malvern and release the exiles."

"I'll tell him," Shattuck said. "Meantime you boys hit for Venus, and take a level course. If this is a boob-trap, you won't live to laugh about it."

THE commissary building had been turned into a meeting hall, and everyone in Carter City who could get out of bed was present. Shattuck found a moment of amusement in thinking that a commissary with so little food in it would have been a circus two days ago. Now it didn't matter. Nothing mattered except that the Alliance had fallen, and that Paul Wainwright, the capable, assured new president of the Earth democracy, had been hoisted onto a packing box to tell the story.

"We conquered the Alliance the same way you took the *Vega*," he told them, "by sheer weight of numbers. It's almost an axiom—when a group seizes power, it tends to decrease its own numbers, so as to increase individual power. The weight against it finally becomes too great. Thus, tyranny bears the seeds of its own destruction."

"What happened to Goelet?" asked Coventry.

"Killed in New York," said Wainwright.

"How'd you start the fight in Asia?"

"Ask Sindra Lal," said Wainwright. "He's had it organized for three years."

"Pardon, sahib. Five years," the Sikh said.

Wainwright waited until the laughter died. "Now, what I consider the best news of all. Every person on Venus will be repatriated at once. The *Vega* will start its return tomorrow—the *North Star* will go as soon as we can repair the damage your Mr. Shattuck caused. Inside of two months, you'll

all be safely home."

He stopped. The crowd was still, and the expectant smile on Wainwright's face faded and became an expression of bewilderment. Doug Shattuck reached for Myra's hand—felt the quick firm pressure that was his answer.

Wainwright said, "Don't you want to go?"

It was Gottschalk who finally broke the silence.

"You know, Mr. President, if it's all right with you I think I'll stay here with 'em. It isn't every day you get to start work on a whole new world."

The cheers came then, rising to shake the everlasting mist.

THE END

VIGNETTES OF FAMOUS SCIENTISTS

By ALEXANDER BLADE

Rumford

To this man we owe most of the knowledge concerning heat which influences everything in our daily life

BENJAMIN THOMPSON (Count Rumford), a native of the town of Woburn, Massachusetts, with a most engaging personality, and strong inclination toward such sciences as existed in his day, was compelled to go to work as a clerk at the age of thirteen. But three years thereafter he married a wealthy widow of Concord, New Hampshire, which not only relieved him from all financial worries, but gave him a social standing in the community, and resulted in his appointment by the governor of the colony to the honorable position of major of the militia.

Being a pronounced royalist as well as a man of courage and determination, he and his wife—who shared his political views—found continued residence in Woburn distasteful, by reason of the decided inclination of a majority of the community to separation from the mother country. In consequence of this he moved to Boston, and when that city was evacuated by the British in 1776, he went to London, bearing important dispatches to the government. There, having made a most favorable impression, he was given a post in the Colonial Office, and later was advanced to the position of Under Secretary of State. In 1779, in recognition of scientific studies and experiments, he was elected a Fellow of the Royal Society.

Shortly before the close of the American Revolutionary War he returned to America, in the capacity of an officer of the English army, but upon the surrender of Cornwallis in 1781 he returned to Europe, took service in the army of Bavaria, and settled in Munich in 1784. Being a man of fine presence, attractive disposition, and excellent character, he rose rapidly in the profession of arms, attaining in turn the rank of major general, military councillor of State, lieutenant gen-

eral, and Minister of War.

Finally, in recognition of both his scientific and military eminence, he was created a Count of the Holy Roman Empire, choosing Rumford for his title, as that had been the name of the town of Concord, New Hampshire, previous to the year 1765, where he considered his good fortune to have begun. In 1799 he retired from military service in Bavaria, and went to London, where he took a prominent part in the founding and establishment of the Royal Institution. Later he moved to Paris where, his first wife having died, he married the widow of Lavoisier, the famous French chemist, and remained in that country until his death in 1814.

Aside from having led a most picturesque life, his title of recognition as one of the great discoverers arises mainly from his investigations and experiments on the subject of heat. Up to the year 1800, heat was regarded as a sort of fixed matter, which was inherent in all combustible substances. The specific name of "phlogiston" was given it by Professor Stahl of the University of Halle. As an illustration of the concept as it existed in the minds of the pseudo-chemists of that day, the phenomena which occur in the reduction of an ore of iron—say hematite—to the metallic state, may be cited. To bring about the change, the ore is mixed intimately with charcoal, the latter induced to burn, and the combustion intensified with the bellows.

Under such treatment both charcoal and phlogiston united with the iron. To account for the fact that the resulting metal weighed somewhat less than the ore from which it came, it was taught that phlogiston was a substance of great tenuity, lighter even than air. Finally, when it was pointed

out that the specific gravity of the metal was higher than that of hematite, it became necessary to advance the conception of phlogiston to that of a substance having no weight at all.

This pre-chemical theory of the nature of heat, was further elaborated by giving another name (caloric) to the phenomenon, and picturing it as a fluid of an elastic and self-repellent nature, which permeated all matter.

Although various scientists before his day—Descartes, Boyle, Francis Bacon, Hooke and Newton—either in so many words, or inferentially, had expressed the opinion that the phenomenon must be due in some way to motion in or of the sub-

stance heated, they had been unable to furnish any proofs of such a theory.

It is to the credit of Rumford that he announced the definite conclusion that heat was merely a form of that force known as motion, and to prove his contention by boring a hole in a bar of soft iron, by means of a tool of steel, and inviting consideration of the heat produced by friction in both, without altering the appearance, the weight or nature of either. The demonstration was characteristic of the man, and before it the vagaries of the phlogiston and caloric hypotheses faded away like mist under the rays of the sun.

John William Draper

He contributed much to physical and photo-chemistry.

JOHAN WILLIAM DRAPER, the American chemist, physiologist and philosophical writer, was born in St. Helen's, near Liverpool, England, on May 5, 1811. He was educated at a Wesleyan school at Woodhouse Grove and at London University. In 1831 he joined some of his relatives who had emigrated to America, and in 1836 took his degree of M.D. in the University of Pennsylvania and was appointed professor of natural philosophy, chemistry, and physiology in Hampden College, Virginia. In 1839 he moved to New York, where he became a member of the faculty of the University of New York. In 1841 he joined Drs. Mott, Patterson, and others in founding the medical school of New York University, in which he was at first professor of chemistry and later professor of physiology. He was the first president of the American Chemical Society. He died in Hastings, New York, on January 4, 1882.

Dr. Draper's principal contributions to the increase of knowledge were in the field of physical and photo-chemistry. By means of his actinometer—produced in 1842—he effected the quantitative combination of hydrogen and chlorine for the first time, solely under the action of light; and while his apparatus and methods were much improved later by Bunsen, Roscoe, Elder and Rigolet, yet to him belongs the credit of having led the way. He was also the first to demonstrate that the different colored rays into which a beam of sunlight can be split, exercise an unequal influence on the decomposition of carbon dioxide by the green pigment, chlorophyll, of plants.

The spectra of light emitted by incandescent substances engaged his attention as early as 1847, and his memoirs show that he had already grasped the possibilities of spectrum analysis in chemistry and astronomy.

He further succeeded in showing that all parts of the spectrum, the invisible as well as the visible ones, are capable of chemical action. His improvements in the art of photography entitled him to an eminent place among the great inventors of the

nineteenth century. Although the Frenchman, Daguerre was the real discoverer of the art of photography, his process was imperfect and practically incapable of useful application. It was Draper's improvements that rendered it possible to apply photography to the representation of the human countenance, and the first photograph was taken by Draper in 1839, in the old building of the New York University.

Though a lifelong teacher of science and a prolific writer on scientific subjects, Draper will perhaps best be remembered as the author of three works which more properly belong to the domain of philosophical history. The first of these and the most important is "The History of the Intellectual Development of Europe," published in 1855, in two volumes, in which he attempts to apply the methods of science to human history and to prove inductively that "social advancement is as completely under the control of natural law as is bodily growth." Much of his data, both scientific and historical, is somewhat discredited at the present time, but the work is a most scholarly production, and is still read widely because its main conclusions have been verified by the lapse of time.

Draper's "History of the American Civil War," published in three volumes between 1867 and 1870, though it gives a graphic and fairly accurate account of the military operations, is chiefly valuable for its elaborate analysis of the causes, immediate and remote, which made a war between the North and the South inevitable. The most popular of his works, however, is his "History of the Conflict between Religion and Science," published in New York in 1874, a candid, philosophical, and fairly comprehensive treatment of the subject.

Dr. Draper's lasting contributions to physiology and to pure chemistry were few and relatively unimportant, yet his name is associated with a number of results of the greatest value in physical chemistry, especially in photochemistry.



DR. VARSAG'S SECOND EXPERIMENT

By **CRAIG ELLIS**

I KNOW it's the Varsag story you want to hear, so I won't waste much time with introductory remarks except for a word or two about Buzz Rogow. This is really Rogow's story, you see; he even took the trouble of writing down a lot of it. It wasn't much good that way, so I got him to tell it to me. That's the way you should be getting it, if there was some way to arrange it, but I suppose this is the next best—putting

it down in his own words, just as I heard it.

The story was a couple of months old by then—you remember it took the police a while to find Rogow—but listening to him, watching his blunt-fingered, oddly graceful hands moving as he spoke, elaborating or emphasizing or explaining things for which he pretended to have no words, he brought alive that whole fantastic episode in which he fig-



**Given all the abilities of a mole,
what could and would a man do; especially
if he was faced with grave responsibility?**

ured no less than Varsag or Arnold or Steiner or Prager. Or any of the many others who were part of this strange story. He brought alive those weeks of panic, and the days at the Rockford mine when—but I am getting too far ahead of the story.

It was Rogow, then, who told me the story. Rogow, the cheerful dark-faced, slightly untidy youth who had overcome a background of somewhat illegal tendency and squalor. For awhile the police followed his career with genuine interest because it looked so promising, in a professional sense. He and an older brother were arrested for running a really ingeniously gimmicked wheel in a Bayonne carnival. The suspended sentence encouraged Buzz to operate a businesslike racket in a fruit and prod-

uce market, and from there he elevated himself to a partnership with a shady photographer known as the Beast. What Buzz and the Beast did remained a mystery, for just about the time the police were undertaking a survey, Buzz shipped out.

He assumed an alias, Lee Furnald, and remained a sailor for an indeterminate period, but he used the time wisely. He assembled flashy evidences of an education, a snatch of poetry from Eliot, odd facts about chemistry, a little mathematics, and by the time he returned to action as a landsman, he was beyond the police in a multitude of ways. They must have been curious about his source of income—he had always been fond of luxurious living, and he still was—but he had somehow con-

trived to attain a certain social standing that would have made overt investigation a very delicate matter.

For in a sense Buzz Rogow was a minor celebrity, a combination of the playboy and sportsman and indefinite entrepreneur. He had friends scattered through the various social scales. You might meet him backstage at a first night or at an ambassador's dinner, at prizefights and art galleries and Third Avenue saloons. You could read what he had said in the Broadway columns, what he had eaten on the cooking page, and the society columns sometimes mentioned him among prominent names in someone's racing or opera box.

As to his income, well, he gambled a bit, and he invested in new enterprises like shows and night clubs, and he had a stock broker. There might be hints now and then that he had never really forgotten his youthful days—though he was probably no more than twenty-six or so—and that he was not above a gentle swindle, but it was always a humorous observation. Indeed, humor was one of the keys to his success, for he was a charming conversationalist. He might speak in cultured accents replete with British idioms, or in the slang of the tout or criminal or Broadway hanger-on—or, as he customarily preferred, in careless mixtures of both. It was another indication of the way his mind worked—there was a lively curiosity and intelligence behind all this—and he could be as subtle or direct as he chose. Probably he did not so much disapprove the straight and narrow as he preferred other routes, which, apparently circuitous, were generally short cut.

That was how he came to meet Dr. Franz Varsag. After Franz Varsag's brother, Emil, had died in the strange aftermath of his experiments with the mongoose man, Rogow somehow managed to find out about the notes Emil

Varsag had left. His own explanation was that he was first attracted by a silly story about peculiar goings-on on the campus of New York University. Perhaps this was true; it sounds possible. At any rate, suppose we let him take it from there. . . .

THAT'S what I said—New York University. I imagine it does sound odd, my saying it began there. You don't ordinarily think of a college as being headquarters for a gang of—but perhaps I shouldn't say it. Might sue me, don't you know.

Well, I was at the Stadium that afternoon, watching Fordham give NYU the annual shellacking, and enjoying it because I had a C note on Fordham, giving 24 points. I'd get up every time the Fordhams scored and wave my maroon feather and take a nip from Prager's gin bottle, until I noticed that there was still a lot of gin left. Prager wasn't drinking much, you see. He had gotten quieter and quieter until he was just sitting there, saying nothing. As if he had big things on his mind, which was impossible, so it bothered me.

"Explain to me," I said, "that expression on your face."

Two minutes later, he said: "What expression?"

"You look as though your father's parole had been turned down."

"Oh," he said morosely. "I was thinking that we are witnessing one of the last of the sure things. Every year we come up to this game with a few of our hot dollars riding these Fordhams and we figure to make a few on this sure thing, and it is a sure thing, but it won't be that way after this year. It's just pocket change to you, but to me it's a living, and this is the end."

It was a tremendous speech for him, and I could see that he felt deeply about it. "Why?" I asked. "They off each

other's schedule next year? Are them NYU's finding out about instincts like self-preservation?"

"No. Next year NYU shows up with a great team."

"A fact? They buying players, you hear?"

"No," Prager sighed. "If they were buying, we could still figure out something about the team. But they're making them."

"What does that mean?"

"I don't know, but that's what they're doing."

Well, you know about Stash Prager. He's a frustrated actor, and sometimes he acts queerer than a dollar watch. So I would have dropped the whole thing except he added, "They're making a track team, too. They got a guy that does a mile in about three minutes."

"That's not much on a bicycle."

"This guy could do it carrying the bicycle. He runs."

"What the hell are you talking about?"

"My brother told me. He's a student there."

That, more or less, is how I found out. Not right then, of course, because the conversation was interrupted by another touchdown, but later, on the way home, I brought it up again because it sounded so completely screwy. I was worried about Prager's mental health. Prager had an offer once from a psychiatric clinic—they wanted to buy his head after he was dead. He turned them down because he thought they might hire agents to consummate the deal shortly after he signed.

Well, Prager told me about his brother, who was a student in the physical education department. He'd watched a kid named Gottlieb loping around the track and it seemed to him that he was making pretty fair time

though he couldn't be sure. One day Prager's brother happened to have a stopwatch on him when Gottlieb started around. He clocked the mile at 3:7 10ths. He thought something must have been wrong with him or the watch, but when he spoke to Gottlieb, the kid begged young Prager to keep it quiet. The whole thing, he said, was part of an experiment by a member of the faculty named Varsag.

"Varsag?" I interrupted.

"Dr. Franz Varsag," said Stash. "You heard of him?"

I wasn't sure. "So where does it go from there?" I said.

"So no place. My brother says this Varsag is from the psychology department, and he told this kid Gottlieb that he is going to make him the greatest track star that ever lived, and after that he was going to try a few new experiments that would show the rest of the fogies in . . ."

I LET him babble on, don't you know. I didn't mind Stash's being stupid enough to accept such a fable, but it was really funny that he hadn't even thought of the possibilities in such a thing if ever it *had* been true. The end of a sure thing indeed! But the damned notion kept kicking around in my mind and I couldn't let it go. I remembered how everyone had laughed at Don Ameche when he invented the telephone.

"This kid brother of yours," I said. "Is he as smart as you?"

"Buzz," said Prager, seriously, "sometimes I think he's as smart as you. He's so smart I can hardly talk to him without my head aching."

Four days later, after having spoken to young Ed Prager and patiently waiting for a break, we saw Gottlieb run. It was after school and the track was empty. Stash, Ed and I were out of

sight. I watched that kid's long legs kick up the cinders, just chugging along so easy he didn't raise a sweat, an ordinary, skinny, worried-looking kid—and my stopwatch said three minutes, fourteen and three-tenths seconds!

"Well?" said Stash.

I didn't answer until two days later, when I showed up with two new stopwatches and caught another secret workout. There was something about the way that kid ran that sent little chills through me. I'd never seen anyone go through his motions. He would turn his head in erratic jerks as he ran, his feet touching the ground gingerly, as if the cinders were hot coals, and his lean muscles so incredibly smooth in their coordination that there was a weird grace to his slightest movement.

"Well?" said Stash.

Did I say I answered Stash that day? Well, I didn't; I couldn't. I was stunned. It didn't figure. The world record was over four minutes for a mile. Six kids like Gottlieb could put the air mail out of business. So what was the answer? I could continue with fragrant hyperbole, but I'll tell you what I did: I stuck a private dick on young Gottlieb and had him shadowed. Imagination is a splendid quality, but one mustn't allow it to take the place of action.

In three days I had sufficient data to convince me that there was a definite connection between the boy and Dr. Varsag. Then I checked on Varsag, including old newspaper clippings about his brilliant brother, who died just about two years before. I caught enough glimpses of what I suspected to make it important that I meet Dr. Varsag.

It took a little doing. A friend of mine, Dr. Linkoff, of the West End Hospital, knew some people who knew Varsag and we got him to attend a dinner party. I sat next to him through

dinner, trying to lay the groundwork, but it was difficult. He was a tall, bony man with huge quantities of white hair and a white spade beard. The first time I saw his eyes I thought they were very lively and sharp and merry, but later he put on a pair of glasses and his eyes seemed to go to sleep. He sat stroking his beard and concentrating on dessert while I tried to keep a semblance of conversation alive. I hinted that I was interested in medical research and I suggested that I had respectable sums of money to give to such causes. Varsag just stroked his beard and kept destroying one raspberry sherbet after another.

I was ready to pronounce the evening a failure, but when he accepted my invitation for a lift uptown, I quickly reviewed my tactics and decided on a frontal assault. When the car stopped, I said to him: "When do you plan to enter this Gottlieb boy in a race, Dr. Varsag?"

He didn't bat an eye. "I haven't decided," he said. "Good night."

THE next morning there was a telegram from him, inviting me to his home that evening. Gratefully, I lay down and slept all day because I'd been up most of the night trying to decode his answer. In the evening I went to his home. It was a huge, old-fashioned house in the West Seventies, and I could see why he hadn't been interested in my mention of money—the place was like a movie layout in old mahogany and oriental rugs. He even owned one of those ghastly butlers—the kind that when they bring you a knife, you don't know whether it's for your steak or your throat. His name was Meadows. It should have been Quagmire.

"Well, sir," said Varsag, "there's no need for preliminaries. If you'll be good enough to indicate your plans and

expectations, I'll make you a handsome cash offer."

"I beg your pardon?"

"Nonsense!" He yanked his beard mildly. "I was at the track the day you turned a stopwatch on Gottlieb. The boy told me he'd foolishly let our secret out, and I was prepared. I matched your detective with a few of my own. I know as much about you as the Bayonne police. I value the secrecy necessary for my continued experimentation at a thousand dollars. Let's not use nasty expressions like blackmail. I offer it to you as a gift. You have only to find some means of assuring me that you will keep your knowledge secret and likewise silence your friend Prager."

"Dr. Varsag," I said, "this may come as a shock to you—but I'm a long way from understanding what you're driving at."

"You're a convincing scoundrel," he said, admiringly, "so shall we honor your histrionic ability and make it fifteen hundred?"

"You're convinced my object is blackmail?"

"Completely a business transaction."

"Hah!" I laughed. "But that's exactly what it isn't—not that way. Listen, Doctor. My expenses are high; it costs me some thirty-five thousand a year to get along. That means seven hundred a week to keep going. I've spent almost two weeks on you already, plus two hundred for my detective. If I take your fifteen hundred I'm just breaking even. The blackmail business isn't fast enough for anyone to live on turnover alone—so what will I live on between you and the next customer? You wouldn't want me to go hungry?"

"No. You might give some thought to cutting your expenses."

"Make it two thousand," I said, quietly.

He was silent then. He took off his glasses and I could see his eyes again as he looked at me; those bright, friendly, understanding eyes that now were puzzled. "You're really not here for blackmail at all," he said, nodding his head. "Not at all . . ." and presently he added, "Will you tell me what you want?"

"Yes," I said. "There's no future in this for me unless you trust me. I got into this originally because I was curious. At first I didn't believe it—now I don't understand it. And now, after having taken the trouble to look into this, and after being troubled enough to have put a lot of thought in it, I'm tremendously interested."

"I see. And money has no consideration in your interest?"

I smiled. "I didn't say that. Money isn't my only reason for interest, but it's the primary one. The mistake you're making is natural enough—you're a good judge of people and you've intuited the larceny in my soul, but you're wrong about the method. As a matter of fact, the last thing I would want to do would be to make your work public."

"Please go on."

"Meaning why, Doctor? Because something like this Gottlieb boy, and even my suspicions can hardly explain him, is worth a lot of money to a man who gambles. Not to any man, but to someone like me. Because I know the kind of people who stake large sums on things like games and horses. I don't bet five dollars, Doctor. If you entered this boy in a race like the Columbia Mile, for instance, that bit of information could be converted to something like fifty thousand dollars, properly handled."

"That's a lot of money," said Varsag, slowly.

"It's not all, sir. I think I could

probably place twice that amount in bets that he couldn't do the mile in three and a half minutes, and I've seen him do it in considerably less. By the time people understood this boy, we could have quite a sum. Possibly a hundred times the fifteen hundred you offered. So you can see why my interests actually lie in keeping your work secret."

"You say *we*, Mr. Rogow. You offer to share your winnings?"

"Of course. And the boy too, if you say so. It's only fair."

DR. VARSAG sat thoughtfully for several minutes before he spoke again. He offered me one of his Russian cigarettes and I lit his and mine. I noticed his hands then, the fingers extraordinarily long and supple, like a violinist's, or a magician's. Presently he said, "I hadn't intended allowing the boy to take part in a public race."

"But you've changed your mind?"

"I don't know," he said, slowly. "There are things to be said for it as well as against it. You've given me something to think about, young man. You've given me a new light on this matter."

"Would you care to talk about it, Dr. Varsag? Your reasons, I mean, pro and con. I'd like to have a part in your decision."

He shook his head. "Extraordinary," he murmured. "I can't believe you're the man I had investigated. Especially after your careful maneuvering last night, I was certain you were nothing more than a cheap swindler, a fly-by-night confidence man. Yet now I can't help feeling that your interest in this transcends the money involved."

"Don't bet on it," I smiled. "I want the money, though I hardly think that part of it interests you, Doctor. What does?"

He stroked his beard thoughtfully, his keen eyes on me. "Don't you bet on it, either," he said. "I'm not a poor man, Mr. Rogow, but the sums you mention impress me. If I were to enter into a compact with you, these would be my conditions: half of all the winnings goes to a fund to build a new physiology laboratory; the other half may be shared by the boy and you. The money would make it possible for him to do several things he can't afford. He wouldn't accept anything from me, but this way he would be earning it."

"All right. I surrender eight and a third per cent. But what about you? You're to be satisfied with the glory, I take it?"

"With the knowledge that I had cleared my brother's name," he said very quietly.

"Then you agree, Doctor?"

"I'll think about it. I'll let you know. Until tonight, publicity was the last thing I wanted. Now I'm not sure. It may be the one answer—the definitive, shocking proof that Emil Varsag was right, and that he failed because of a great misfortune."

I rose with him and shook hands. "I'll wait until I hear from you, sir," I said. "Meanwhile I'll ponder some way to effect a guarantee that I'd play honest with you. Of course, that works both ways. I'd want to know a few of the details of this miracle I'd be betting on."

He nodded and escorted me to the door. Before I left he remembered something. "By the way, young man, you might tell your friend Prager to call off the detective he's had following you all week. You've an interest in maintaining secrecy, as you said. Good night."

Can you beat it? Prager with a hired bloodhound on my tail! If it

kept up, I'd be leading a procession of dicks around every time I went into a men's room.

But the important thing was that I was on my way. The beginning of the second chapter waited only for Dr. Varsag to agree, and I was certain he would. If I had had some inkling of what was to happen later, probably I . . . but there's no point conjecturing, is there? What happened, happened. Two days later, Dr. Varsag called me on the phone and said he was ready to go ahead.

CHAPTER II

IF ANYBODY ever comes along and tells you that everything comes to him who waits, tell him to wait. Then hit him over the head with a chair. The trouble with that advice is that maybe you don't want everything that comes to him who waits—things like the double x, for instance. Which is by way of saying that I could see that my old friend and bosom companion, Stash Prager, was building himself up to knife me. It didn't seem important then, but I don't believe in taking chances.

"What's the idea hiring a hawkshaw to tail me?" I asked him.

"What's the idea I don't hear from you three, four days?" he retorted. "I find you a good thing and you bid me a fond farewell. I got to protect my interests, don't I? If you're making a buck on this deal, I'm entitled to a percentage. That figures, don't it?"

"What the hell do you think you are—my headquarters?" I said. "I got to notify you what I'm doing? If you want to be my wife, say so, and I'll tell you I ain't interested. If you want to be my friend, keep your bulbous nose clean and have patience. So far all I been doing is spending money, not

making it. You want a percentage? Kick in with a fast fifty bucks. You can't expect a return without an investment?"

"Where would I get fifty bucks?"

"What'd that detective cost you?"

"Fifty."

I looked at his sour face and I laughed. "So now you're broke?" He nodded. I peeled off five twenties and gave it to him. "Go buy yourself a mirror and a gun," I said. "Think over the nasty way you're behaving, then take a look in the mirror at your ugly, suspicious face and blow your brains out."

He favored me with a feeble smile.

"Thanks, Buzz," he said.

I thought that was the end of it, at the time.

Meanwhile, I was seeing Dr. Varsag and this Gottlieb kid more or less regularly, sometimes two or three days running. Did I say running? Well, if it were Gottlieb I'd meant, I'd say flying and be a good deal closer to the truth. Because I saw the boy run day after day, and the wonder of it only grew. Even after I knew what Varsag was doing with him, I wasn't sure that I understood. The total effect of additional knowledge was peculiar. You'll see what I mean.

After Varsag decided to play along with me, the first thing I advised was to stop Gottlieb from running where anyone might conceivably have a look at him. If Prager's brother had noticed what was doing, others might do the same. So after that the Doctor ran him in the country, generally out on Long Island. We'd wait till the boy's classes for the day were over, then we'd drive out in my car to a little place I had near Babylon, along the south shore, and there the boy would run along the beach for perhaps an hour or so.

Little by little Dr. Varsag told me things about his work. He showed me a picture of the boy, taken almost a year before. I said that his legs looked strangely thin and weak. Varsag had nodded. "Yes," he said, glancing down the beach to see if Gottlieb was in sight again. "He had infantile paralysis as a child and he never quite recovered. That was my primary interest in this work. Or perhaps I should say that was my point of departure from what my brother had done."

It wasn't easy to believe, watching the boy run. But then, it wasn't easy to believe that you were seeing any human being running at that boy's speed. It was dead winter then, and sometimes the beach would be covered with snow. Varsag and I would stand huddled together behind a clump of hushes, stamping our feet and moving about to keep from freezing in those vicious blasts of icy, moisture-laden winds, and with us would be the kid. Varsag would give him the sign and he would slip out of the huge fur coat he wore, and he'd be standing there for an instant in a thin shirt and a pair of shorts.

HE'D dig in his cleats and then he'd be off like something shot out of a cannon. Once I turned away to blow my nose just as he got ready, and when I turned back there was nothing but a long, straight stretch of cleat tracks, and far, far off, almost out of sight, the kid was tearing down the beach. He'd run like that for an hour or so, sometimes going down for miles and then turning back, so that we'd have no idea of how much ground he'd covered, and other times, when I asked for it, he'd go about half a mile each way and keep turning back, so that we could see him. Those times he would come by, if he felt like an extra sprint, so fast he was hardly more than a blur.

Most of the time there was no clock on him. Dr. Varsag didn't like the idea of timing him all the time, as if he were a prize horse, and the kid didn't seem to like discussing the time he'd made. In fact, the whole thing was conducted almost casually, and Varsag seemed to get what he wanted from just talking to the boy. After a couple of weeks I found out why.

It came about one day when Bert—that was the kid's name—said he wanted to run on hard soil that afternoon. "I feel like really letting go today, sir," he told Varsag. "I can't make my best time on the beach. The sand gives too much and the surface isn't uniform."

"I thought you preferred sand," said Varsag.

The kid reacted oddly to that, I thought. He looked at me quickly, then he mumbled, "Yes, sir, as a rule. But not today. I haven't been doing enough real running. I couldn't sleep well last night. My legs developed a cramp. I think I'd like a hard surface today."

That interested me. I mean, not only the conversation, which was innocent enough except for something that seemed to lie in the inflections of their voices, but the fact that it led to a chance to time the boy. So I took them to a back stretch of country where there was a dirt road, now hard with frost, and fairly straight for some two miles. But I made a mental check on a giant old oak, and when I'd measured a mile from it on my speedometer, I stopped. I parked off the road and we got out.

It was a beautiful winter day, now passing into late afternoon. There was a tang in the air, and the sun was warm and bright and the sky cloudless and bland. The kind of day when people get to say that winter is really their favorite season, which is nonsense, but you know what I mean. Dr. Varsag and I

were in good spirits, so I couldn't understand why Bert seemed so ill at ease.

He threw me his coat, and when he kneeled I could see his long, loose leg muscles twitching. But then he stood up again, his feet sort of pawing the stiff earth, and his lanky frame full of nervous motions. He turned his good-looking young face toward Varsag, the slight hreeze ruffling through his close-cropped blonde hair, and the sunlight on his face that seemed so troubled, and he was about to say something when he looked at me and changed his mind. Then, from a standing position, like the old-fashioned running stance, he whipped his legs like pistons and shot down the road.

I clicked in my stopwatch and followed him with my eyes. The Doctor was standing beside me. "You've noticed it, haven't you, Buzz?" he asked me, quietly.

"Sure," I said. "I don't know what it is, but I've noticed it."

"Why haven't you asked me?"

"I don't like to ask. Part of our agreement entailed your telling me what this thing was about. You know I'm about ready to try entering Bert in the Southern Conference Mile. If there's anything I ought to know, I've confidence that I'll be told in time."

"The Southern Conference Mile," Varsag repeated. "That's an important event, isn't it?"

"Just about the most important outdoor track event of the winter season, Doctor. It ranks with the Princeton Invitation Mile and the K of C games. There's nothing like it until the IC4A games later on."

"I'm afraid I can't let Bert run in anything like that, Buzz."

I didn't say anything for a moment. My hand, holding the stopwatch, contracted so fiercely that I squeezed the

stem to a halt. I lost sight of Bert then, when I turned to Varsag. "Why?" I said.

"It's too big an event. It's too important."

"We aren't playing for marbles," I said. "We can't afford to let Bert run in any but the biggest events if we're to make a killing."

VARSAG looked out over the fields, then at me. "I'm afraid," he said. "I don't know what will happen to him. I've been hoping all along that these signs meant nothing, that they would pass. Now I don't know anymore. I'm beginning to wonder if my experiment has succeeded, after all."

I shrugged. "I don't get it," I said. "The riddle's too much for me, Doctor. I pipped off several sentences ago."

In the silence I looked down the road and saw Bert's slender form approaching the great oak on his return run. I barely had time to press the stopwatch in. For a moment he was lost around a slight bend of the road and then I saw him again. On he came, running with a curiously erect carriage, his torso stiff, and his legs seeming to touch the ground with an almost awkward delicacy. And yet—all right, so I'm daft—it was with that strange, effortless grace. But more than ever, he kept twisting his head about erratically, as if some invisible fear pursued.

When he flashed by, I clicked in my stopwatch. I looked at the figures and I felt crazy and a little sick. One minute, fifty-three seconds for the mile! I didn't show it to Varsag and I didn't say anything because I didn't trust my voice. A few minutes later the kid came back. Varsag helped him into his coat. "You ran well today, Bert," he said. "Under two minutes for the mile, I'd estimate. Do you feel better?"

The boy didn't answer. He buried

his head in his coat and looked out at the road as we drove back to the city, his eyes following every moving object intently. I dropped the boy at his dorm at school and when I started downtown, Varsag said, "I'd like to spend an hour or so with you now, Buzz, if you have the time."

If I had the time. I'd had nothing but weeks of it, waiting. I was ready to try a sample milking from the golden calf. I'd talked the kid up here and there, trying to sound a little potty on the subject, the way people do about their proteges, and I had elicited enough tired smiles from my friends to indicate that it was time to begin converting those smiles to cash.

When we reached Varsag's place, he took me upstairs. He had a private laboratory there, and it was the first time he'd asked me up. I went in, feeling cold and gloomy in that strange place, with the graying twilight coming in through large glass skylights. I looked around at the endless rows of machines and retorts and tubes and the kind of paraphernalia you see in movies where Boris Karloff brings a stiff back from the cemetery and gives it a shot of glamorous electricity.

Silently, Varsag led me to a corner of the lab where he had a desk and a couple of chairs. He asked me to sit down but I said I wanted to stand. He opened a closet and took out a very large, thin volume and laid it on the desk. He opened it and I saw it was filled with newspaper clippings about his brother, Emil. I'd seen most of them, as I said.

Varsag quietly thumbed through the pages, the flapping of the paper the only sound in the lab. Momentarily his face grew bitter as he looked at the pages, but it passed. He didn't have the kind of face that could stay bitter long. He leaned against the side of his

desk and laid a hand flat down on the book, and when he took off his glasses I could see that his eyes were shining, but from what I didn't know.

"I think you know most of these clippings," he said. "Together they form an engrossing, morbid story of a man who dared strange experiments that ended in disaster. They are a recital of the events in the last days of Emil Varsag, but they are not the story of Emil Varsag. . . ."

I KNEW what he called the recital of events. It was the climax of a mystery that read like a crime thriller, and though it had never been completely solved, enough facts or near-facts had been found to supply a fertile field for macabre imaginations. The story was that Emil Varsag had given his best friend the reflexes of an animal—a mongoose, it was later said, and to test the transfer of that animal's speed and dodging powers, the mongoose-man had become a prize-fighter. He became unconquerable in the ring, and on the night of the championship fight he had killed the champion in the ring. Later that night both he and the brilliant Dr. Varsag had been found dead in the cobra's cage of the Bronx Zoo. There were investigations, naturally, none of them of much use, but it was a field day for awhile. They called the experiments a crime against the laws of nature and man. They said Varsag's work was a perversion of science, the meddling of a madman. The stigma that was still associated with those mysterious events explained why Franz Varsag had assumed I was prepared to force him to buy my silence. All this passed swiftly through my mind in the pause which followed Varsag's statement, and which evidently waited for some rejoinder from me.

Still I said nothing, and after a few

moments more, Dr. Varsag said, "My brother willed me this house. I came here from California to settle his estate and leave again. I stayed on because I found a hidden closet where Emil had secreted the notes that were the fruits of years of work. From them, and from otherwise enigmatic scrawls in his diary, I pieced together enough to make me determine to stay here in what had been his laboratory and carry on his work. To that end I accepted an appointment from the university. But perhaps I ought to show you what is in the adjoining room. . . ."

As we entered the adjoining room, the first thing that hit me was the heavy and not unpleasant mingling of animal odors. The room, which took up the rest of the upper story, was filled with numerous cages of various sizes, and it was illumined by batteries of overhanging lamps which Varsag later told me were violet ray lamps, designed to compensate his menagerie for lack of sunlight. For it was a menagerie, no mistake about it. There were animals ranging from the common rabbit to three full grown kangaroos, from toads to some two dozen assorted monkeys. I walked beside the Doctor and gazed in confusion at roosters and ring-tailed monkeys, at newts and ostriches, at jackrabbits and fuzzy sloths. Beside the odors, the enormous room filled with such a cheerful variety of noises and cries that I wondered that I had not heard them even through the evidently soundproofed walls.

The Doctor let me wander about—I told him I was looking for Prager—while he threw handfuls of food to some of the animals, and when at last I completed the circle to him, I found that both he and I were smiling. There was something about that noisy place, so full of life and sound and smell that was funny and cheerful.

Maybe you've felt that peculiar warmth and good humor when you've visited a pet shop.

"It's nice here," I said.

Dr. Varsag lifted himself up on a crate, where he sat with his legs dangling. He nodded and tossed me a peanut, and for some moments we sat there quietly, shelling peanuts. "My brother," said Varsag, "was keenly interested in the lower forms. Years of keeping a house full of pets led him to some conclusions that may strike you as obvious. We all know that many animals are superior to humans in various ways.

"The sense of smell, for instance, has undergone slow atrophy among we humans. Our sight is far inferior to that, say, of the vulture. Our hearing cannot compare with a dog's. And so forth and so forth. As I say, this is nothing new to you. But what would you say to a scientist who felt that the human animal could be equipped with many of the superior abilities of these lower forms? That there was a way to *transfer* some of these abilities to humans? That the owl's capacity for low threshold sight, or the bloodhound's magnificent olfactory equipment might be given to a man?"

"Or the reflexes of the mongoose?" I ventured.

"Yes. Why not?"

"Then it was true?"

"Yes, it was true. My brother developed a method that was a compound of extremely skillful surgery and diet and training, and by his method he was able to effect a transfer of coordinated visual and muscular reflexes from a mongoose to a man. With luck he might have been hailed as a genius. Instead, with the misfortune that hounds pioneers, and with results no one could have foreseen, he was called a witch doctor."

HE BRUSHED a few fragments of peanut shells from his impressive head and he sighed. "What wrecked him was actually a greater success than he had expected. He transferred not only the reflexes of the mongoose but other innate characteristics. His mongoose man developed a highly overwrought nervous system, a tension that brought out a killer's streak, until finally . . ." and here Varsag's voice grew soft and almost wondering, "finally, he grew weary of inadequate combat, bored with the absence of danger."

He looked at me a moment before continuing. "The mongoose man began stealing away to the zoo at night. There, in darkness and quiet, he would enter the cage of the king cobra, hereditary foe of the mongoose, and he would duel the cobra, dodging its thrusts, content with the play alone, until weary and happy he would return home in the morning. That was what happened to him the night he killed the champion. Distraught and unstrung, he went to the zoo that night, but he didn't see that a new cobra had been put into the cage with his old enemy."

"The coroner said that he had been struck from behind several times. As for Emil, we know only that he followed his mongoose man to the zoo. Perhaps Emil tried to save him. Perhaps he was temporarily driven insane by the sight and leaped into the cage to die beside his best friend. I know from his diary that he was very moody towards the end. He had begun to realize that he had succeeded too well, and he saw the enormous consequences that loomed."

Presently I said, "And you've carried on his work, Dr. Varsag?"

"I've gone ahead, yes. I've experimented with animals for more than a year. A few months ago I took young Gottlieb into my confidence. He was,

and still is, my laboratory assistant at the university. He is a pre-medical student, quite a brilliant boy. He volunteered to be the human subject towards which my work inevitably led."

He tossed me another handful of peanuts and smiled wryly. "Don't think I'm a monster, Buzz," he said. "I would gladly be my own subject if it were possible. I was certain there was no longer any danger in the kind of experiment my brother conducted. I had long before found where he erred, perhaps because I was always his superior in surgery, if not in brilliant theorizing and imagination. But to eliminate any possible element of danger, I chose an innocent animal for my experiment, quite the most innocent animal I know. And I gratefully accepted Bert's offer."

I let my breath out slowly. "What animal, Doctor?"

"The ostrich."

"Ostrich?" I said.

"You wonder why?"

"No more than I would at any other animal. But why an ostrich?"

"Because there were several considerations, and the ostrich fulfilled them all. First, I wanted to try the transfer of a harmless ability. Second, in case there was any doubt as to my success, I wanted a harmless animal, so that no dangerous characteristics might be transferred. Third, I wanted, if possible, to transfer an ability which might be of value to a human being. The ostrich and its great speed at once answered every specification."

"I considered other animals which used mainly two legs for locomotion, animals like kangaroos and rabbits and monkeys, but none ran so much like a man as the ostrich. The ostrich is a relatively gentle animal, with no predatory habits, shy to extremes, and cer-

tainly its fleetness was a valuable ability. Few animals match its phenomenal. . . ."

AS VARSAG continued speaking, through my mind flashed remembered images of Bert running. The airy step, the gingerly touched foot, the quick, sharp turns of his head—how essentially birdlike they were! That was what had seemed so disturbingly strange to me the very first I'd seen him running! And this afternoon, his exaggerated stiffness, and the rest of it—had it possibly come to such absurd lengths? Thinking about it I couldn't help laughing. Varsag stopped speaking.

"I'm sorry, Doctor. It's just that I'm beginning to understand what you meant when you wondered if your experiment had succeeded."

"It amuses you?"

"Yes," I confessed. I looked down the rows of cages to where the several ostriches stood with craning necks, solemnly turning to examine their neighbors over and over, dismayed by the constant noise, their dark and mournful eyes popping out of their little heads. I laughed again.

Varsag said, "The failure of my experiment wouldn't be funny."

"But you *haven't* failed," I objected. "I wouldn't laugh at that; I'm really laughing more from relief than anything else. You've succeeded to a point where I can't trust my eyes. Bert ran the mile in one minute and fifty-three seconds today!"

"You don't understand," Varsag began. "What good is—"

"But I do understand. You think Bert's adopting added characteristics of the ostrich. He likes to run fast. He likes the feel of sand underfoot. He's acting quiet and shy. It's a good case—but how would you react if you

suddenly discovered that you could run more than twice as fast than the fastest man alive? Don't you think it might sober you a good deal? Wouldn't it make you feel queer, realizing what strange new power lay in a pair of legs you'd known all your life? And who doesn't prefer sand? Go down to any beach and see how bookkeepers and shipping clerks get an urge to dash about madly the minute they feel sand between their toes. If you want to keep Bert out of the important, public-crowded races because you're afraid of his developing shyness—why, with all due respect to you as a scientist and a doctor, I disagree thoroughly. You wouldn't encourage such shyness in any otherwise normal hoy, would you? Surely you'd agree that the way to cure shyness was to fight it, to force the issue until it was beaten."

I felt I had been convincing, but I couldn't be sure. For some moments Dr. Varsag sat quietly, considering what I had said, absently stroking his beard. He looked, in Prager's words, like an out of the world character, his hony, long frame folded up easily atop a crate, his hair disarranged, his eyes thoughtful, and on all sides of him the cages of chattering, singing, yowling animals, and peanut shells over his tweed trousers. He munched his last peanut.

"Maybe you're right," he said, adding, "especially because I've a safeguard, in case there is any mischief. A simple operation would undo everything I've laboriously built up with Bert. I suppose you might liken it to a complicated electrical circuit—if you merely changed one connection or loosened one wire, the whole circuit would be undone. . . ."

"So that's that," I said. "Have one of my peanuts."

"Phooey," said the Doctor. "They'll

ruin my appetite. I'd like you to stay for dinner, Buzz. I want to hear what you're up to. You're so good a confidence man—now, don't object; no one but a confidence man could have persuaded me so easily—and you're so good I'm really interested in the way you operate." He smiled. "Maybe one of these days we'll try a little experiment on you. I like your mind."

"Sure," I laughed. "Maybe you could cross me with a fox."

"At that," said Varsag, "it might help the fox a good deal."

What a laugh, that conversation. I liked that business of me and the fox, don't you know, but a jackass would have been more correct under the circumstances. Not that I didn't believe what I'd said to the good Doctor, but I'd just said things that sounded right to me, thinking that if I was wrong, well, certainly Dr. Varsag would know where. But I must have underestimated my own—no, that's not quite it, either. The trouble lay in that I didn't appreciate the special kind of myopia that men like Dr. Varsag are liable to. Or maybe you'd call it tunnel vision, the inability to see very well to either side of their objective.

Why, his heart was so set on going ahead with his work that he couldn't view any possible danger objectively anymore. He wanted to be convinced, to begin with, and I suppose at the beginning my point of view was that it wasn't really my cup of tea at all. Watching that boy would still occasion shivers down my spine, but what the hell! And the ostrich business was really funny, I don't care what you say. Go watch one and imagine a human acting like that foolish bird.

It was so absurd to me that I couldn't help telling Stash Prager about it the next day. For which you can page the jackass again. But he was so damned

curious, and it was on my mind, and I was feeling good at the time because I'd just laid the first small bet, so I told him the whole story. A calamitous error, to be sure, but you'd never have dreamt it, watching the way he received it, his cherubic face bewildered, his curly hair practically standing on end.

But a calamity, just the same.

CHAPTER III

AS I was saying, I managed to place the first bet the next day. For a G, as I recall, with Larry Swift. Swifto had quite a rep as a bad gambler, and when I primed him with talk about my boy Bert, and how he was a comer who was a cinch for the Southern, Swifto bit hard. Under cross examination I admitted that Bert wasn't well known, that he wasn't even on his school's track team. But, I stoutly maintained, he would not only be on it shortly, but he would win the impending Cortlandt Park cross country run and would then be invited to enter the Southern mile.

"Put your money where your mouth is," said Swift.

What was the wind-up? He laid me five to one that Bert, who wasn't even on the track team yet—as he checked by calling the school public relations office—wouldn't win the Cortlandt run, and five to one that he wouldn't draw an invite to the Southern. Or a total of a G to my two hundred. Offhand you'd agree with him that he had something. Bert had to win, not place among the first five. And he had to be invited to enter a race that was exclusively for champions. So you'd agree, unless you'd had the uncanny experience of seeing Bert run.

Prager, who was with me, kept licking his hungry chops and saying I wasn't putting enough money down. He said I could get another ten G's in bets

if I offered to take even money. Which might have been fatal, if I'd done it. You can't go around making crazy bets without stirring up investigation—not with my reputation as a shrewd article, and not when you bet heavily on a relatively unimportant event. I'd placed just enough to feel the first hook sinking in.

The kid got on the track team easy enough. He showed up two days later at the park where the cross country team was practicing. He went over to Sterling, the coach, and he started to mumble something about wanting to run. Sterling looked at him, shrugged, and said, "This is a public park, son. Take off your pants and run."

So Bert took off his pants—he had trunks on underneath—and lost himself among some forty boys at the starting line. The coach gave them a short talk and they were off. And Varsag and I got into my car, which I'd parked some distance away like any curious on-looker, and went up ahead to about the halfway mark.

It was a good thing we did. We'd given Bert explicit instruction to stay with the pack, and to place no better than third, and to try to look at least as tired as the others. Well, the next time we saw Bert the damned fool was two hundred yards out front, with a pained expression on his face. I stood up in the car and yelled at him. He waved and shook his head mournfully, but he slowed down. He eased off gradually and he placed second.

He might have come in first if we hadn't been there at the finish line, where he could see us. He was running neck and neck with the ace of the team, a colored boy named Rohhins, but when he spotted us, he let Rohhins beat him by five yards. At that, the coach threw his arms around Bert. "Where the hell did you learn to run like that?" he

shouted. He'd seen Bert leading a good part of the way, it seemed.

Bert stuck his tongue out, trying to look fatigued, and he was breathing so hard I thought they were going to call for a pulmotor. The coach threw a blanket around him. "You're not in any too good condition, but we'll remedy that," he beamed. "Where have you been keeping yourself all season? Why didn't you show up before this? What are you, a frosh?"

And so on, but that was the beginning. They put Bert on the varsity and he ran several times a week for the next two weeks. He never allowed anyone but Rohhins to beat him, and he nosed Rohhins out twice. With the result that first one, then another, then all the rest of the New York papers ran little pieces about him, noticing that NYU had come up with an extremely promising junior. It was expected and unavoidable, but it had some disquieting aspects.

FIRST, it brought Prager and Swift around to watch practice. On the second afternoon I spotted Prager lurking among the nude hushes, his brother with him. I got rid of the brother, after Prager told the kid he would beat his can off if he transmitted a syllable of what he knew, but I couldn't get rid of Prager. On the fourth day, after the second piece in the papers, Swift came nosing around. That was one of the days when Bert beat Rohhins. I drove Swift back downtown, and all the time he kept looking at me as if he were undecided whether to shoot himself or grab the wheel and steer us both into the East River. I was thankful I had had the foresight to warn Dr. Varsag against attending the practice sessions anymore, and I kept my mouth shut, except to remind Swift, meanwhile looking the least bit worried, that even Roh-

bins had never placed better than second in two years in this same event.

"Rob me and kill me and throw my body to huzzards," Swift sighed, "but please don't lie to me. Where do you come off to bet that a cross country runner will make the Southern Mile? You have something up your capacious sleeve, including tickets for a charity bazaar in my honor."

I didn't deny it, though I had warm thoughts concerning Swifto and the immediate future. Part of the plan, you see.

But Bert wasn't behaving according to plan, which was another consequence of the newspaper pieces. More and more people were showing up at practice, and they made the kid nervous. I would talk to him about his jitters some nights at Varsag's, but it hardly helped. What did help was his intelligence. He knew what was going on and he understood it thoroughly because Varsag was completely honest with him, and he was as determined as any of us that he would fight off his shyness. Sterling and the assistant coaches were crazy about him, and there was a very satisfying element in his new local, school-hoy fame as an athlete. If it weren't for his jitters, he would have been really happy.

Well, you know what happened at that Van Cortlandt run. Bert not only placed a solid first in a strong field, but Robbins outdid himself and placed as close a second as Bert allowed—about twenty yards. This Robbins was so used to beating Bert that he hung on somehow, and the rest were strung out for half a mile. But all the way I was in my car, following the race, yelling Bert's name to him now and then to slow him down. As it was, he came in just short of the record. The coach went out of his head.

The next thing was to get Bert into

the Southern Conference Mile, which was less than three weeks away. The coach used to kiss Bert on sight, but the first time Bert broached the subject of running the mile, any mile, to him, Sterling started to give the kid a lecture on the dangers of letting success inflate the ego. Started, I say, because he knew better than to believe that this shy, well-mannered, intelligent kid could get cocky. The way Bert told us about it later, Sterling stopped his lecture, looked at him gravely and said, "You really think you could run the mile, Bert?" Bert quietly said, "Yes, sir," and that was all there was to it. All except the lecture I gave him on being careful.

"No better than four and twelve, at the very outside," I said. "Stay between that and four fifteen and you're in." I was frightened because I couldn't be there, but we pulled in Prager's kid brother, gave him a stopwatch and instructions and told him where to stand, etcetera.

Bert ran the mile in four minutes, ten seconds.

That night Sterling phoned the Conference officials for an invitation for Bert. The papers said, the next day, that the Conference people thought he was nuts. All he had was MacMitchell, the intercollegiate champ, and he wanted to enter a second man. They said no at first, but when Sterling threatened to yank MacMitchell, they arranged for their representatives to give Bert a qualifying run.

Bert ran the mile in four minutes, eight and three-tenths seconds and posed for pictures that made a few of the wire services, and made me sick for an hour after I heard the trouble young Prager had had flagging him down. He'd run the fastest quarter mile ever done, but it was unofficial. What a stink it raised. Just short of really put-

ting a damper on my plans.

SO WHEN they announced that Bert Gottlieb was going to run the Southern Mile, I didn't have to call Swift. He dropped in unannounced, and met Prager on the way at the elevator. He pulled out an envelope, counted out a thousand and threw it down on my antique coffee table.

"Swift pays his debts," he announced. Then he counted off the rest of the money in his envelope and threw that down, too. "The sum of twenty-two hundred dollars, which sneers at your long-legged goon and backs my contention that he does not place among the first three in the Southern."

"Is that your money?" I said.

"Are you behind in your rent? Has your sister got all her own teeth? Is your uncle still in solitary? Do I ask you personal questions? I offer you genuine coin of the realm. Are you taking?"

"I hear," I said, "that there will be quite a field." I watched his face fall a little. "I hear the Conference has received acceptances from some pretty fair runners," I said. Swift mumbled something between an oath and a groan. "I hear that in addition to MacMitchell, there will be Fenske, Venske, San Romano, Butler, Schneider, Speed Vogel and the Rideout twins. And for the special occasion, the best in the business, Glenn Cunningham."

"You have heard too much," said Swift. "Alas and alackaday."

I pulled out a prepared wallet and rummaged about in it, coming up with a heavy chunk of moo. I counted out twenty-two hundred which I put down on top of Swift's money, and then slowly I laid down ten crisp one thousand dollar bills in a neat fan beside the pile.

"Be of good cheer, my merry popin-

jay," I counseled. "Not only am I taking your absurd wager, but here is ten G's worth of green goods that my boy Bert finishes first in the Southern Conference Mile."

"First?"

"First."

"First?"

"I didn't say second."

"You said first," said Swift.

A large drop of perspiration ran down his long nose. It hung on the tip for half a minute, and when it dropped to the rug, Swift quietly sat down. He started to touch my money, then pulled his hands away. He looked at me for a full minute, then at the money, then at me. And all this time he was sweating, until the air around him was charged with clouds of vapor, like a brewery horse on a cold day. Then his chin drooped and his eyes glistened. I thought he was going to cry, but he held on. Only his voice cracked.

"You can't do this to me," he whispered hoarsely. "I'm the only support I've got. It isn't legal. It isn't fair!" He got up and began to pound my coffee table. "Goddammit!" he cried. "The rich get richer and the poor get poorer! Goddammit! Goddammit!" Then, helplessly he sank back into his chair, gulping in breaths of air. Presently he leaned over the table to me. "Buzz," he whispered, "let me in on it. I can be useful. You need me in this. I'm the man you need! I'm the man!"

"Why?"

"Because I can place bets for you! I can get bets where you couldn't. You're smart money in this town. You start laying paper with a few people and the market'll close tighter than a jar of olives. But me . . ." He laughed bitterly. "The Federal Revenue sent agents to look me up because so many guys listed me as their source of income. I got men waiting on cor-

ners to offer me partnerships in secret platinum mines. Didn't you pick me for your sure thing bets on this Gottlieb kid? I'm a natural, Buzz! They ain't born like me every minute."

"Okay," I said. "It's a deal. I can use you. Have a drink?"

HE CLOSED his eyes and let his breath come back slowly. He looked at me and at his money, and when I nodded, he counted off his twenty-two hundred and held it tightly in his fist. I took the thousand he had paid off and handed it back to him. I pointed to the bar and raised an eyebrow. "Expensive brandy, please," he murmured. He was quickly recovering his poise and jauntiness. A moment later, sipping his drink, he said, "Buzz, by this act you have acquired a bondsman and vassal for life. Your wish is my command."

"Listen," I said, "and listen closely. I expect to have maybe another fifteen thousand later this week. I can place part of it and Prager can take care of maybe five thousand, but you'll have most of the moola to play with. I'll cut you five per cent of the net for your services. Now here's the dope. . . ."

Well done, I commended myself later. I'd gotten Swift quickly and neatly. He was damned right I needed him! But I'd also given him a handsome deal, and while I don't like to go around piling up debts of gratitude, I felt pleased. Swifto was an honest guy with incredible amounts of bad luck. The only reason he never killed himself was because he was afraid something worse would happen to him if he tried.

Within ten days he had plastered the town with my money—twenty thousand worth, at varying odds, some on Bert placing among the first two or three, some—not too much—on his placing

first. Added to what Prager and I had placed, if Bert—I mean *when* Bert placed first, I'd stand to collect something over seventy-five thousand. It was a lot of money, and I wondered if I had overdone it for a first try. That was before I found out what Prager had done.

He had taken the five thousand I'd given him and gotten an average of fifteen to one that Bert would do the mile in under four minutes!

I almost went out of my head when he told me. He sat there, his mouth drooling, telling me who he had hooked and asking me over and over what his cut was going to be. He had raised the winning stakes to close to a hundred and forty-five thousand dollars! I know, I know. When you talk about that kind of money it stops having much meaning. It's like counting beans in a jar. When the paralysis passed, I stumbled across the room and picked up one of the andirons. I'd have killed him if Swift hadn't hit me over the head with a bottle.

But after that there was nothing to do but go the rest of the way. I hocked everything but my stopwatch. I mortgaged my beautiful custom Cadillac down to the chromium exhaust pipe. My country place, my apartment and all its furnishings including the silver frame on my grandfather's picture, my bank balance and everything I could borrow in a hurry—the works—I put it all down as fast as I could, wherever I could, but not too much in any one place. I didn't want anyone leaving town. And when I was through, I had more than fifty-five thousand down, with the expected take close to a quarter million. I don't know what it might have been if the odds hadn't fallen off quickly when my money kept showing. A quarter of a million. Don't even think about such things.

I saved a little. I needed money to pay the six bodyguards I got for Bert. Then I bought round trip plane tickets to Miami for Swift and Prager—he was in it, so what could I do?—and myself, and I had some money for food and aspirin. I was like crazy the week before the race. I followed Prager from one steak house to another, watching him eat. Dr. Varsag examined me twice and gave me sleeping pills. Winchell wrote: *"Friends of Buzz Rogow reported seriously worried about his health. The story is that he spent his money on an invention to grow zippers on bananas. Now he thinks people follow him."*

Only I didn't think. I knew it. Some of the people were Shylocks to whom Prager owed sums like six dollars, and who I paid off with the money I saved by not eating. Who the others were I didn't know, but they were there. You can't go around getting rid of that kind of money in a week or so without raising dust. Every other guy I met had a question in his eye. If I went anywhere I had a fleet of cabs following me. The DePuys invited me to the opera and batteries of binoculars gave me the once-over as I sat in the box, and I averaged a dozen flirtations with high class floozies between every act.

It was bad, don't you know, but there was one bright spot. I kept telling myself that. If it was going to be one shot, at least it would pay off. Maybe later I could try again, betting that Bert could do the mile in under two minutes, so maybe the comment was all to the good. Not that it was comment, particularly. Not many people actually knew what was cooking, but the wires were up, as they say in Harlem. People knew *something* was cooking.

That was the way things stood the day we flew to Miami. Ever been in one of those big passenger planes? The

door opens easily. You unlatch a lever, then you push hard against the wind, and then there's nothing but seven thousand feet of cool air between you and the ground. I knew all that. If I'd known more, I'd have opened that door and stepped out.

But I'll tell it to you the way it happened. . . .

I DIDN'T dare see Dr. Varsag until the morning of the race. I went to the hotel where he had been staying a few days and gave him an accounting. In round figures the calculated take was two hundred and forty thousand. Take off half for Varsag's fund: one hundred and twenty thousand. Half of that to Bert left sixty thousand. Swift's five per cent plus a cut to Prager plus my expenses left me fifty thousand. I had put up fifty-five to win fifty.

"Good Lord, Buzz," said Varsag, "stop trembling."

"How?" I said.

I sat there another hour, waiting for Bert to arrive. I found a hypodermic syringe and Varsag caught the gleam in my eye. "Go ahead," he said. "It won't harm you."

"What is it?" I said.

"An experimental serum for hoof-and-mouth disease."

When Bert finally arrived, he was accompanied by coach Sterling, an assistant coach, and the bodyguards, now increased to eight. Sterling couldn't understand what Dr. Varsag was doing there, and when I was introduced to him, he screwed up his face and looked as if someone owed him an explanation. He didn't get it. Varsag listened to his complaints quietly, agreed with him, but pointed out that Bert and he, Varsag, were good friends and if Bert wanted to see him—

"But these bodyguards!" said Sterling. "Who's paying for them? The

minute Bert sets foot in the street they follow him. They came down on our train, and they've managed to get official's passes for the track. They're driving Bert crazy. Isn't that so, Bert?"

Bert was busy chewing something, but he shook his head. Only he shook it seven or eight times, like you shake a mop on a window ledge. He kept turning and looking from one to the other of us out of the corner of an eye. He didn't look very nervous, but if you looked at him you started to shake all over. Not me; I was shaking to begin with, but he had the bodyguards twitching like mad. After Varsag got rid of Sterling and sent the bodyguards down to the lobby, we both spoke to Bert.

"You're all right, aren't you, Bert?" Varsag asked him. "I want you to tell me the truth. You understand what's worrying us."

All he got for an answer was a loud gulping sound. Bert had been standing facing a window, so I walked around to where I could see his profile. The huge wad he'd had in his mouth was gone. He'd swallowed it, I thought, but somehow, from the way he'd been chewing, I'd supposed he was chewing something unswallowable, if you get what I mean. I sat down and continued watching him, while Varsag spoke. Sometimes a wide, foolish grin crossed his face. When the Doctor finally went to the phone to order lunch, Bert crossed to another window and he actually strutted like a drum major. Or like a goddamned ostrich! You heard me. He had the pop eyes and the grin and the walk of an ostrich!

"Eggs for me, Doctor," said Bert, quietly, grinning. "About six hard boiled eggs. They're good for me. And toast and milk."

He seemed almost all right then, and while we had lunch I spoke to him. I

told him that he'd have to be careful when he ran, that he was to make the mile in just under four minutes, and to pay strict attention to the signals of the coaching staff, who'd let him know where he stood all the way. "Stay with the pack most of the way," I said. "On the last lap put on a driving finish, not too fast. That'll do it. If you—"

I didn't finish what I was saying. The Doctor wasn't looking and he thought I didn't see. He had opened one of the eggs and was eating it, but with a swift movement he picked up one of the other eggs, and shell and all he swallowed the egg whole! It disappeared down his throat in one smooth gulp. He grinned and went on eating the other egg. I almost choked at the sight, but I said nothing. I felt if I tried to say anything I would shriek. Bert ate three of his eggs like a man, and the other three he just threw into his gullet.

And Varsag, talking on and on about his experiments, never saw a thing. At the end of the meal he remarked that he had never known Bert was so fond of eggs, and mightn't they be harmful before a race?

"I like 'em," Bert smiled. His Adam's apple jiggled when he spoke.

We drove him to the stadium, and on the way, sitting beside Bert in the car, I watched him carefully. He had a bag of enormous candy drops in one of his pockets, and he would surreptitiously swallow one of them from time to time. When they were gone, his fingers seemed to have nothing to do, so he toyed with one of the buttons of his coat. I must have looked away for a moment, because the next time I looked, the button was gone and Bert was grinning.

BY THE time we reached the stadium the other two buttons had also dis-

appeared, and, I was afraid, my sanity. I almost blurted the truth to Varsag. I couldn't stand it. But I remembered that I was in a hole that reached almost to China. A few hours wouldn't make any difference. I would tell Varsag everything immediately after the race. How was I to know that I would never see the end of that race?

I remember the way the Miami Stadium was that day. It was a beautiful day, warm and pleasant, and the air filled with good cheer. It was a Saturday afternoon, and countless thousands filled the streets leading to the stadium, and inside there were pennants and school banners and bands, and lovely women and everything that goes with a great sports spectacle. But I walked along like a drunk, braced against Prager and Swift, wondering where I'd lost Dr. Varsag, thinking of hard boiled eggs.

There were dozens of people I knew, and I kept shaking hands automatically, and after we were in our box I leaned against the rail and waited through the early events with eyes closed, because everywhere I looked I saw Bert. The waves of sound all around me were like insulation against my fears, and in the midst of the shouting and yelling I found peace. And then I became conscious of a growing quiet, punctuated again and again by tremendous shouts, but the intervals quieter all the time, with a hushed, suspenseful note, and I heard the announcements and knew that they were getting ready for the Southern Conference Mile.

I opened my eyes and I knew I was seeing sports history. They had the greatest gathering of milers that ever trod the cinders there, and as each star appeared, he was greeted with an ovation. Cunningham, a little older, but one of the all-time greats, the redoubt-

able Fenske, the good-looking Rideouts, Butler the arrogant, the dogged Venske, MacMitchell in his best year. Bert came out with MacMitchell and shared his cheers, and Archie San Romano followed, and then Speed Vogel.

Sterling was talking to MacMitchell. Then he went to Bert. I saw that Bert was holding his fists tightly closed. He was twenty yards away, but I could see how pale he was, how stiff his legs were. Every time the crowd yelled he winced. He had stopped dead for an instant when he first came out and faced the shout from the forty thousand people who ringed the cinder track, and only the succeeding shout when San Romano followed had made him move again, and then he had jumped forward as if he had been struck a stinging blow.

The starter called the entrants together and a roar of noise rolled through the stadium, followed by a thrilling silence. In that silence the runners crouched down, all except Bert, who remained standing stiffly, legs together. Sterling shouted at him; the starter spoke to him, but he stood there. The starter raised his pistol.

"On your mark! Set!....." Bang! The pistol cracked sharply and the runners were off. But Bert hadn't started with them! He had jumped at the sound of the pistol, and then as the crowd came to its feet with a mighty shout, he leaped forward, a flashing streak!

In ten yards he had caught them. Then he was past them. He was running faster than I had ever seen him run before. He was like something shot out of a catapult, his long legs striding stiffly, his arms tight against his sides. In a hundred yards he had picked up a thirty yard lead! The crowd, electrified, responded with a single, mighty shout that was torn from the throats of forty thousand people.

For an instant Bert wavered. I could see his pitiful face. He flashed by me and I saw the terror in his eyes, his mouth crazily askew. He raised his arms and covered his face with his hands, trying to blot out the sight and sound of those frenzied thousands. Faster and faster he ran. At the hundred and fifty yard mark he was fifty yards in front. The roaring grew to thunder, louder, louder, louder. . . .

And then it happened.

Suddenly Bert swerved from the cinder track, ran across the inside of the track and hurled himself into a jumping pit and buried his head in the soft dirt!

All I remember of what happened after that was the noise. It seemed to fill the whole world. For a few moments I continued to look at the pit, but it blurred, and my brain was filled with the noise, and I was rushing through people.

CHAPTER IV

WELL, that was the beginning.

Yes, that's what I said, the beginning. Not of the part of this story that concerns Bert, of course, but of Arnold and Steiner and the rest. There was this division between these two sequences of events, the one depending on the other, so I think of the Bert part of it as the beginning of the other, the really— Bert, you say? But of course I'll tell you about it. Just let me tell it as I see it. This is the part you wanted to hear about, isn't it? All right, then.

There comes a time in every man's life when he decides how much he can take. Some break so hard the lesson is permanent, and they don't live to remember what broke them. Like that epidemic of stockbroker's disease in the early thirties, when you couldn't walk through the Wall Street district with-

out an iron umbrella every time the market went sour. And some men bend. Maybe it's a thing you get used to doing. You take enough and you learn to bend. Maybe that's why when a man tries to find release in drinking they say he's on a bender. It's a thought.

I'm the bending kind. I don't get drunk; drinking only makes it worse. What I do is go someplace and sit down and remember. I think of the time I had tropical fever in Peru, or the time I served thirty days for vagrancy in Missouri, or the time—I was a kid then—when I won thirty thousand dollars on the horses in Rio one afternoon and lost it in roulette that night on a gim-micked wheel. I know wheels, brother.

So that by the time Swift found me three days later in Coral Gables, I was all right. I'd taken one bus after another as long as my money held out, not caring where I was going. I wound up in Coral Gables and Swift, who had the police out checking railroads and busses and airlines, traced me there. I was sitting on an old box near the seashore when he walked over and sat down beside me.

"Hello, Buzz," he said. "How's it going?"

"Nice," I said. "Pretty nice."

He gave me a cigarette. When I finished, we went into town and he bought me some ham and eggs and I went to a barber and got a shave and then I had my suit pressed. Then we took a train back to Miami and he paid our hotel bill. Prager was gone. They were all gone. The town was quiet; it was towards the end of the tourist season. I wanted to hang around a few days. Sort of haunting the scene of disaster because I didn't want to run away. I wanted to file it with those other memories.

Two days later, at Swift's insistence,

we went fifty miles up the coast and spent a few more days in a drowsy little town. We slept late and went fishing and drank beer. And after awhile we talked, and he told me what had happened. I hadn't looked at a newspaper. He told me how Varsag had taken the kid away, no one knew where, and how the papers had gone crazy. The kid had run a hundred and fifty yards in eight seconds or therabouts. Naturally there was talk about Varsag. Sterling had shot his mouth off, and everyone began remembering Emil Varsag and his mongoose man. The university suspended him—he was still missing all this time—and there was clamor for an investigation, but no one knew whether New York or Florida had jurisdiction. And so on.

I wondered how it would come out, but I remembered Varsag's telling me that he could easily undo his work, so I wasn't worried about that part of it. The boy was intensely loyal to Varsag, and when he had been brought back to normal, there was no doubt that he would stick by the Doctor and disclaim everything. They'd never prove a thing. I was the only other person who knew about—but I wasn't! Prager knew. I'd told Prager that day when I found out. And that was no good.

So Swift and I went back to Miami and took the first plane to New York. The apartment was still mine until the first of the month when all the notes would fall due, so I went there. When Swift and I got into the elevator, the boy said that several of my friends, including Mr. Prager, had been living there for the past week. They'd said I told them it was all right, and the superintendent knew Prager, and was it all right?

I OPENED the door and there was Prager, without a shirt, and two

more men with him in the living room. A third came out of the kitchen. He was wearing an apron and holding a frying pan.

"What the hell is this?" I said.

One of the men near Prager got up and walked right past me and closed the door, pushing Swift away. He leaned against the closed door and said, "Sit down, Buzz."

"I don't get it," I said, "and I don't like it. This is—"

The man said, "Did anybody ask you what you like? Sit down, both of you." He put a hand into his jacket and took out a large, dark blue automatic. He didn't point it at me. He let the weight of the gun pull his arm down, so that it hung loosely, the gun pointing to the floor. He said, "Make it easy on yourself, Buzz."

I walked across the room and picked up the phone. Prager cried out, "Buzz, don't!" The man who was sitting near him sat up a little and shook his head at me, his forehead creased into a frown.

I was dialing SPring 7-3100. The man who had been in the kitchen put down the frying pan and came over to me quietly and watched the first four holes I dialed. Then he wiped his hands clean on the apron, turned me around, took the phone out of my hand and punched me in the face, I fell down to the floor. He stood over me, still holding the phone, and when I got up, he hit me again. I sat on the floor after that, leaning against a chair. I couldn't see out of one eye.

Then he dialed a number. "Ira?" he said. "Max. He just got in. No. No. Swift. Me and Harry and Frank. Prager too. Sure."

After he hung up he went back to the kitchen. I could hear him frying bacon and cracking eggs. The other two, Harry, who had been at the door with

the gun, and Frank, who sat near Prager, sat down at the table again with Prager. They had been playing pinocle with Prager and they seemed very intent on the game because Prager was winning. Swift sat in a big armchair not far from me but he didn't say a word. I got up and went into the bathroom and washed the blood off my face. When I came out, Max was bringing out four dishes of bacon and eggs. They talked about horses while they ate, all except Prager. He never said anything, and he was hardly eating. His eyes kept straying to me, and they were more frightened than I had ever seen them.

They were having coffee when the door bell rang. Harry looked through the peephole and opened the door and Big Ira Steiner came in. I'd wondered if Max was calling Ira Steiner, though I didn't know Max or Harry or Frank, but the name Ira meant something to me. Now I knew. Ira threw his tan polo coat on a chair and came over to me. "Hello, Buzz," he said, pleasantly. He looked at my face and he turned around to the others. "What'd I say?" he said, going over to the table. He had thick, loose lips that hung open most of the time, but now he wet them and kept them tight. He looked from Harry to Frank to Max through the thick lenses of his glasses that made his eyes enormous. "What'd I say?" he said.

Max said: "He tried to phone the cops."

Steiner looked at Max. Max was about twice my size, with hands like bowling balls. Steiner was big too, but his reputation was the really big thing about him; it made his size unimportant. He picked up Max's half-filled cup and threw the coffee in his face. He stood next to Max while Max took out a handkerchief and wiped

himself dry. "I don't talk to hear myself talk," Steiner said. Then he came over to me.

"I'm sorry, Buzz, he said. "You all right?"

"I'm all right," I said.

"I'll tell you how it is," he said. "I got maybe twenty-five G's of what you laid around. I sent my boys around picking up after you. I got interested in what you was doing. You know I got a great admiration for you, Buzz. I think you got a head on your shoulders."

"Thanks."

HE PULLED the cellophane wrapper off a cigar. He looked at me with his huge, staring eyes and he waved the cigar gently in acknowledgement. Then he took out a pair of clippers. "Just the same," he said, "I hear you lost a lot of money. I hear you're broke." He clipped the end of his cigar. "But just the same, I think you got a good head."

"Spill it," I said. "It's a big build-up."

"I think it's worth it," he said, lighting the cigar. He stared at me. "Tell me about your friend and the animals."

I let my breath out. "I don't know what you mean," I said.

"I mean Dr. Varsag and his monkeys and ostriches and rabbits."

When I said nothing for a minute, he said, "Don't stall, Buzz. I got no time to waste. I got most of the dope from Prager a couple days ago. I got enough to know what I'm after."

Suddenly Prager jumped up. "They hit me, Buzz!" he cried. "They made me tell them! They kept hitting me until I couldn't . . ." He stopped speaking just as suddenly. Steiner had turned around in his chair, waiting for him to finish. When Prager silently slumped into his seat again, Steiner

turned back to me.

"Don't believe that fat slob," he said mildly. "He shot his yap when he was peddling your bets around town. Making cracks that the other boys are up against a human ostrich." He waved his cigar apologetically. "I've got to investigate cracks like that, Buzz. Fifteen to one, that's a lot of money for someone to lay on under four minutes for the mile. But we didn't hit him. After what happened in Miami, we just asked him and he told us. I don't like to hit nobody, Buzz. I like for people to tell me when I ask them. Like I'm asking you."

"You said you know already," I said. "Why ask me?"

Steiner nodded. "Don't get nervous. I'll make it short. I got most of what I want, like I said. But you can help me, Buzz. I got an idea that might pay off big. Very big. Big enough to make your little scheme look like coffee and cake money. I'm not saying this against you. You got a good head. But this is big." He licked his lips. "Millions, maybe. Interested?"

"Maybe," I said. "Where does Dr. Varsag come in?"

"He's your friend. He owes you something. He might do something for you if you worked out a nice way to get him to do it.

"Is it true what Prager told me? Is it true that Varsag can fix a man so's he'll be like an animal he picks? Like his brother did with that prizefighter who wanted to kill snakes, and this kid who turned into an ostrich? Can he do that? Yes or no."

I said: "You haven't answered my question."

Steiner waited a moment, then he said, "Buzz, I'm giving you a chance to come in with me. I can get along without you. I told you I know the answer. I just want to hear it from

you. I won't ask again."

I'd been thinking while we spoke. I knew he wasn't as sure as he said he was. I knew that if I corroborated Prager it would relieve him, but even if I disagreed, it wouldn't stop him, whatever he was up to. Prager had known almost as much as I did, and I knew he had spilled his guts. I could gain nothing by denying it. I could find out what he was doing by admitting it. If he needed my help, there would be time to make another decision.

I thought of the other elements too. The money, for instance, though it wasn't too important then. Or what he might do to Swift and me if refused. That he would play honestly if I was honest with him I hardly doubted; in his own way, Steiner was square. He was a big enough cut-throat and gangster to be able to afford such luxuries.

"It's true," I said.

"Okay," said Steiner, getting up. "Get your things on. We got a trip ahead of us." He had turned around, talking to his three hired hands, but he kept looking at Swift. He looked from Swift to me as if he was going to ask me something, but he saw the answer in my eyes. "You too," he said to Swift, shaking his head. "We'll need a bus before we're through," he growled.

When we got downstairs, Steiner and Harry went with me in my car, and Prager and Swift followed with Max and Frank in a huge maroon limousine. Steiner asked me where my bank was and I told him. "Let's go there first," he said. I drove uptown. Maybe I had ideas when we passed cops, but I didn't try any of them. New York is a big town, but Steiner could find me in it if he wanted to; besides, I had nothing on him.

Outside my bank Steiner handed me an envelope. "There's twenty-five thou-

sand inside," he said. "Deposit it in your account. It's the dough I won from you. I can spare it."

"My mother told me not to take candy from strangers," I said.

"Very funny," said Steiner. "Consider this a down payment for reasons of good will. You owe a dozen guys and I don't want them coming around, or taking away this nice car and your apartment. You'll be able to send them checks this way. And don't bother me with questions."

After I made the deposit, Steiner told me to drive up to West End and Seventy-first. I parked there and Steiner went into a house on the corner. A few minutes later he came out with a very small man who wore a blue slouch hat and a fuzzy dark coat, and who carried a black bag like a doctor's. Steiner put him in the back seat with Harry.

"Buzz, this is Professor Arnold," said Steiner.

The little man stretched forward a hand. It was a wiry but very delicate hand. "Charmed," he said cheerfully. "Call me Professor."

Steiner stuck a hand out of the car and waved to the car behind. It shot forward and I followed. We kept going uptown until we came to the Washington Bridge, and after we crossed it, I asked Steiner where we were going.

"To London town," the Professor called, "to make our fortunes."

That was all the answer I got. We kept riding. . .

WE RODE for some three hours.

We crossed through a strip of the north Jersey roads and went upstate through Middletown and Monticello and then turned off the main road. We were in the lower Catskills. On this bleak March day they were cold and deserted, the towns still asleep like hi-

bernating animals. By the time we reached Woodbourne the day had turned to slate-gray twilight, washed by intermittent rains.

We stopped in Woodbourne and Steiner went into a bar, where I saw him go into a phone booth. Then he waved the other car ahead again and we followed. We drove perhaps two more miles and turned up a dirty road. A man in a drenched raincoat was waiting for us at the turn. He got on the front right fender and flashed a light which was answered from a large grey-stone house at the end of the road. We stopped at the house.

When we went in, we were greeted by a fire in a large fireplace and delicious odors of food. A Chinese cook named Jimmy stuck his head into the living room and called bello to Steiner and Steiner introduced me to the two men who had been there with Jimmy. One he called Flipper and the other Pittsburg. I knew Pittsburg; I'd met him around at crap games. Flipper looked enough like him to be his brother.

And now the atmosphere changed. The house was well furnished and comfortable in a countrified way. The radio was on and we listened to the Make Believe Ballroom and Harry did a soft shoe dance on the hearth in front of the fire. Pittsburg was whistling and mixing old-fashioned and it was very cheerful. We all sat around and relaxed. I felt relaxed too, don't you know, in spite of everything, and the drink helped. So I spoke to Swift and said I wouldn't worry if I were be and Steiner winked at us and indicated Prager, who was peeping into the kitchen. I tell you it didn't look much like a design for crime.

Sure it was crime. What else, with Steiner in it? But I didn't know more than that until half an hour after din-

ner. We ate big steaks and baked potatoes and salad and good coffee, and then there was some B and B, and all during dinner a lot of talk about horses and girls and what there was to do around this part of the country, as if it were understood that we were staying there for awhile. Once Prager started to tell a story about how he had had a job as an actor near Woodburne, but nobody believed him and he shut up.

But after dinner Steiner waited a bit, and then asked the Professor and me into a study that adjoined the living room. I'd watched the Professor during dinner. He was a smiling, good-natured person with a sly sense of humor. He didn't seem to know the others very well, all except one or two, and mostly he spoke to Steiner, who, obviously liked him and frequently repeated the jokes the Professor made. The Professor would crack one, pull on his sharp, bird-like nose, and remark, "I ought to send that in to Winchell. Or Sobel; more his style, I think." When we went into the study, he took my arm in a fraternal way.

Steiner lit a fresh cigar. I sat on the edge of a large desk, facing him and the Professor. "Buzz," said Steiner, "the reason I took you all the way up here is your friend. Dr. Varsag. I followed his tracks. He and the runner kid are up the road about a quarter mile. They been holed up there since the Miami fizz. It works out nice for me. If Varsag was in the city, we might have to bring him to a place like this. But this is nice. I rented this place last week to be near him."

He blinked at me through his thick lenses. "That's number one. The Professor here is number two. You know him." When I shook my head Steiner said, simply, "William the Finger."

The Professor nodded, smiling at my

startled exclamation. "William the Educated Finger," he amended. "Also known as The Finger, The Scientific Finger, Arnold the Finger, Professor William Arnold, Professor Lightfingers and many, many others. I prefer Professor."

WELL, I didn't say anything. What was there to say? Of course, I knew him. I recalled what I'd thought when I first saw him carrying his little black bag and it made me smile. I had the honor to be in the same room with an internationally famous crook. I say crook because he was exactly what that rather old-fashioned word conjures up—the old-fashioned crook, the kind they don't breed anymore, the masters and real craftsmen, the artists. Sometimes men like the Professor light only the relatively obscure pages of police blotters and jail rosters; sometimes an author comes along and brings, say, a Jimmy Valentine to the attention of the world. It wasn't necessary in this case.

That was Professor Lightfingers. A few years ago George Raft played a lead in a movie that was built around one of the chapters in the Professor's life. There was an item in the *Times* that Simon and Schuster had persuaded him to write his autobiography for them. Every time a big safe surrendered to cunning, the police sent around a messenger to pick up the Professor's alibi. Before the Safe and Loft Squad did anything on these big cases, it was said, a special Alibi Squad first went over the Professor's alibi. Two years before he had been on the cover of *Time*; that was on the occasion of his fourth and final announcement of his retirement, when he was tendered a testimonial dinner at the Waldorf by the Detective's Mutual Aid and Benevolent Association.

I bowed from the waist. "I beg your pardon," I said. "I should have recognized you, Professor."

"Quite all right," he acknowledged. "My retirement, no doubt." He ripped his fingers. "I feel like a new born babe, fresh in the world. I have dear Ira to thank for making life so promising once more."

"Nice," said Steiner. "So that's number two." He opened the door and called out, "Pittsburg! Bring me a mouse!" He waited until Pittsburg brought him a covered, medium-sized cage, then he closed the door and put the cage down on the desk. "This is number three," he said, taking the cover off the cage.

I looked at the scratching, blinking animal. It was the size of a rabbit, dark brownish-black, with peculiar, large claws.

"That's not a mouse," I said.

The Professor nodded. "A mole," he said, softly. "An English mole. Think of it. Ira says you are very intelligent. Think!"

I looked at the creature, then at Steiner, then at the Professor. I backed away from them. I thought I would choke if I didn't catch my breath. I kept shaking my head, and I heard my voice saying, "No, no, no," over and over. The sweat ran down my face.

"For the man who operates in darkness," the Professor said, very softly, "who breaks in where he is not wanted, who digs in to avoid pursuit. Think, my boy. Think of what it would mean to combine the talents of the English mole and The Scientific Finger. . . ."

I sank down in a chair, unable to take my eyes off the fat, half-blind little animal in the cage, watching it scratch away at the bottom of its cage. The sound of its claws was the only sound in the room for a long minute, and then I became conscious of the

radio and the voices in the other room. I shook my head.

"You mean no?" said Steiner.

"No."

"Jerk," said Steiner, taking a long pull on his cigar. He had a disgusted look on his face. "Why can't you do things nice?" he asked. "Here I was feeling good, having two people like you and the Professor in this with me. What do you think I'll do—give you and Swift a bus ticket home and call it off? You want me to hurt Varsag's kid, maybe? You want me to make trouble? I don't like trouble."

"The kid?" I said. "No. You wouldn't. You wouldn't."

"Convince me," said Steiner, his huge eyes glaring at me. "I got to get Varsag to do it. I'm not particular how. If that kid disappears now they'll hang it on Varsag." He turned the palms of his hands up, as if to say that he was the prisoner of circumstance. "Buzz," he said, trying to sound patient, "you got a head. Use it. You don't need a diagram to get it. You got a head."

The Professor clasped his twittery hands and waited. . . .

HALF an hour later, Flipper and Harry drove me to the house where Dr. Varsag and Bert were staying. When I had agreed to ask Varsag to do what Steiner wanted, Steiner left the method to me, but he hadn't been prepared for my decision to go immediately. I told him why, and I was honest with him. "There's no story that I can give Dr. Varsag," I told him. "I'll have to tell him the truth."

"But he won't do it that way," Steiner thought.

"He won't do it any way," I'd said. "All I can do is convey your threats and convince him you mean what you say."

"So what the hell do I need you for? I'll convince him faster."

"Don't bet on it. I'll do what I can. Maybe I'll sell him."

It was raining again when we left, and the roads were thick pools of mud that sucked at the wheels of our car. The house was just a little down the road, a one-story cottage to which wings had been added. When we drew near it Flipper blinked his headlights twice and stopped the car. I heard a motor start up the road and a pair of headlights switched on. A car, facing the other direction, slowly drew up to us and a man leaned out from the driver's seat. There was another man with him.

"What's up, Flipper?"

"Everything okay?"

"Sure."

Flipper turned to me. "Okay. You walk the rest of the way. If you want us to pick you up, turn the blinds in the front room twice."

I got out and walked through the rain for the twenty yards that separated the house from the road. When I drew closer I could hear the music of a symphony playing inside. The blinds were drawn. I wiped my feet on a dry, sheltered doormat and brought down the heavy brass knocker twice before the music was turned down.

Dr. Varsag opened the door. Over his shoulder, near the phonograph, I saw Bert. "Buzz Rogow! What in the name of. . ."

It was an hour before our conversation was through. I told him everything, just as it had happened, from the beginning. He had hired his own detectives to trace me. He had been so worried about me that if it hadn't been for Bert, he would have looked for me himself. I felt a deep, angry pain when I told him what I had brought him. He was one of the finest men I had ever met.

And when I had finished he sat quietly, thoughtfully, and asked me questions about Professor Lightfingers. And about Steiner. I told him everything I knew. His fingers drummed lightly on his knees in time with the fast last movement of the Sibelius violin concerto which Bert was playing in the next room, then he got up and went to the phone.

"It's no use," I said. "Wire's cut."

He held the phone to his ear and listened. "So it is," he said. "Thoughtful of them, but how do they expect you to get back to them?"

"We arranged a signal. They're waiting just down the road."

"Good. Will you call them, please?"

I got up. "I knew your answer from the start," I said.

The Doctor reached out and touched my arm. "Don't misquote me," he said. "You see, I mean to go through with it."

I stared at him. I couldn't understand, and then I thought of the boy in the next room. I had a lump in my throat the size of a fist.

Varsag shook his head, as if divining my thoughts. "It isn't only Bert," he said, quietly, "or you and your foolish and loyal friends. It's also me. The experiment interests me. I am offered an unusual and willing subject. There are aspects to this—"

"*But you can't go through with it!*"

He took off his glasses and began polishing them, and then he raised his eyes until they met mine, and I saw the profound gentleness and goodness and strength that shone in them. "Trust me, Buzz," he said, softly. "Trust me just a little."

CHAPTER V

THE days that followed weren't bad at all, really. Of course I had the

thing on my mind all the time, but after awhile it was more in the back of my mind than anywhere else. That was because I had confidence in Varsag. He had shouldered the whole thing himself, and once or twice when he got a chance to talk to me, he told me enough to give me a glimpse of what he was doing. Of which more in a minute.

Dr. Varsag spent most of his time with the Professor. He told him frankly that he was studying him, a requisite of the operation. The Professor enjoyed it, not only the idea, but the Doctor's company. He went for walks with Varsag all through the countryside, and evenings they played contract bridge with Swift and me, the two of them always as partners. When Varsag brought over his phonograph and records, the Professor formed a bloc with him against the others who wanted to hear Glenn Miller and racing results. They got along tremendously.

And I was the apple of Steiner's apple-size eyes. He didn't know how I had done it, but I was his boy from then on. He pounded my back so often and so heartily that I developed nervous indigestion. He trusted me completely. I took Bert back to the city in my car alone. He showed no sign of his former prowess, but he ate eggs like a normal human being again, which was more than one could say for Prager, for example. He spoke to me of the whole thing without much reticence, and his main concern was for the experiment which had failed, and for the way he would be received in school again. Varsag had given him letters to the Dean and several others, and Bert had a cogent and innocent story prepared, but he knew that Varsag's whereabouts was to remain a complete secret.

In the city I loaded up with all sorts of fancy food, with fowl and beef and fruit. Varsag had called his ghoulish

butler on the phone in advance, and Bert helped me find the instruments and equipment the Doctor had listed for me to bring back. It went smoothly enough, though there was a brief flare-up in the papers when Bert showed up. The university, baffled itself, maintained its dignity and disclaimed everything, including notions that Varsag had done anything to Bert.

So we were quite a happy colony, the twelve of us, including the cook, Jimmy. Elmer, the Woodbourne Police Force, drove up one day and said there'd been reports of a lot of shooting in the neighborhood. We gave him a drink and showed him our target range, a bench at fifty yards with whiskey bottles on it. He took three shots himself and missed and then Pittsburg and Harry missed to make him feel better. It was the only times I'd seen them miss. Naturally, most of the colony stayed out of sight, and we bought our food miles away to forestall curiosity.

Dr. Varsag's other main occupation was his long sessions with the moles. At his request, Steiner supplied dozens of English moles, and when the Doctor wasn't observing them, he was dissecting them and making intricate diagrams and marking up his charts and notebooks. One day he lectured to the Professor and me about them.

It started when Varsag smilingly said, "So you want to be a mole, Professor? Have you thought about it much?"

The Professor produced one of Steiner's cigars. "Naturally," he said. "It isn't every day I become a mole. If I had my way, I'd sooner be a mole on Rita Hayworth's . . . ah . . . escutcheon. Can you arrange it?"

"I'm wondering if I can arrange this. Look at this little animal. Have you ever thought of it as an engineer? Yet it is undoubtedly nature's greatest en-

gineer, far more capable in the arts of underground engineering and burrowing than any other animal, far more capable than most people imagine. It builds elaborate underground habitations, with tunnels and galleries of the most complex order, with perfect instinctive knowledge of stresses and strains, drainage, support—all the problems its work involves.

"A man who equalled the mole's mastery of its art, who did the equivalent of its burrowing, would in one night be able to dig a tunnel 37 miles long, of sufficient width to admit the passage of his body. . . ."

The Professor squinted at Varsag. "You're jesting, Doctor."

"Quite the contrary, Professor."

The Professor looked at his hands and held them up. "But how?"

Varsag sighed. "In due time. It requires either the imagination of experience and knowledge, or the lack of imagination which our friend Steiner exercised, knowing only his goal. But in due time. . . ."

The next day I had a chance to speak to Varsag alone.

"Doctor, it isn't that I don't trust you, but there was another time when I might have spoken and didn't, and I've regretted it since. No one knows better than you what you're doing, but isn't there a chance that your interest in your work blinds you to the possible results? If you equip a man like the Professor with such appalling ability, with Steiner to direct him. . . ."

We were in one of the Doctor's mole fields near the house. He took my arm and led me to the road, where we started walking. "Suppose I agreed with you—which I do not," he said, "what could we do about it? Proceed calmly down this road and vanish? Call the State Police to rescue your

friends? How would we explain it? Perhaps charge Steiner with abduction? He could easily establish you'd been to the city alone a few days ago. Why didn't you call the police then?"

"I'd say I was afraid for your life. You were still there."

"But your friends Swift and Prager are there now. Would you tell the police you didn't care about *them*? And remember—the assumption behind calling the police is that they could rescue anyone in time. No, I'm afraid we'd have trouble explaining, and this is no time to explain. Besides, the threat of Steiner's future revenge is quite as formidable as his threat to harm Bert. Steiner understands that as well as we do, and it explains why he let Bert go."

"Why do you say this is no time to explain?" I asked. "With Bert—"

"Because I've already begun my work on the Professor."

I stopped in my tracks. "When?"

"Two nights ago. You were asleep. Steiner was there to help me. Don't look at me like that, Buzz."

I said nothing.

Varsag sighed. "Buzz," he said, slowly, "has it occurred to you that I may really know what I'm doing? You accept the marvel of my surgical skill—though the surgery is a minute part of all this—with no thought to what else I might be able to do. If you believe I can change a man's whole internal nature so that he adopts many characteristics of an animal, why can't you believe that I might change characteristics already part of *his* nature?"

I looked at him sharply. "Change the Professor's nature?"

"Exactly."

"But in what way?"

"In many ways," said Varsag, thoughtfully, "in many ways. The mole is not a vicious animal, to begin with, and I am satisfied there is nothing vi-

cious in the Professor's nature. Nothing *wrong*, actually, if it comes to that. Habits are not ineradicable . . . nor is there any reason to believe that the re-direction. . . ." He was talking more to himself now than to me, and presently his voice was so low I couldn't hear him.

We turned back silently after awhile, but when we had neared the house again, the Doctor remarked, "If you'd care to, I've a book in my room that may interest you. It deals with the subject. And you might do worse than observe the Professor. Perhaps you'll notice some results of my preliminary work." He smiled wryly. "You see, were I not satisfied with my success, I could always refuse to finish my work. I daresay you've overlooked the one indisputable escape always available to me, and with no attendant harm to anyone else."

"What?"

"Suicide," said Dr. Varsag. "Come, come, my boy, there's no danger of it, unpleasant as it sounds. All the same, I'd sooner do that than run the risk of so perilous a failure. Does that answer you?"

IT ANSWERED me, all right. After that I kept my mouth shut and my eyes open. Among other things, I noticed that the Professor had taken to eating alone, and that Steiner himself frequently went for the food, as if to keep the Professor's new diet, which I knew about, from attracting the attention of the others. But it wasn't all.

There was a change in the Professor. Or maybe not; maybe I just thought it was there because I was looking for it. Or maybe it was so slight in coming that the others didn't notice—none of them had known him except Steiner, and he said nothing. One manifestation was the Professor's increasing desire for

solitude, or, at least, for less company. He had struck me as a very gregarious sort of person, with a constant desire to be with others, to have people listen to him and repeat his jokes and stories. But now when he was with others, he paid attention to the conversation around him, instead of concentrating on what he was going to say next.

And there was something else, as I soon discovered. He was spending much of his solitude in building things, all sorts of things. I only saw one, a large, incredibly faithful model of a battleship, with fantastically intricate installations that controlled the gun batteries and lights and anchors, complete to interior turbines. It called for the patience of a saint, and the manual dexterity of a genius, and if one was prepared to find the latter, the former was a bit surprising.

"But he's changing, my dear Buzz," Varsag explained. "His room is a workshop and museum. He's working on a model of a house of the future he read about, with enormous glass facades, mounted on a sort of swivel foundation so that the wall exposures can follow the course of the sun. He has Steiner jumping about supplying him with the necessary materials, I can tell you."

"And all this is the result of your preliminary operation?"

"Only in a limited sense. Every talented, energetic man seeks an outlet for his talent and looks for recognition. Unfortunately for humanity, as in the Professor's case, sometimes a combination of environment and other circumstances provides an outlet which is anti-social, but the drive remains. In the Professor it drove him to a fabulous eminence in his profession, a position which he made little attempt to keep a professional secret. The fame, or notoriety, you see, was what he wanted—the recognition. And among people he

always tried to shine a little in other ways removed from the talent of his hands. He fancied himself a wit and rather a thinker, and wanted that recognized too."

"And now?"

"It's a little early to be absolutely sure, but it looks as if he is finding new outlets. The diet I gave him provides him with enormous energy, which, to be sure, he will need later. Meanwhile he expends it, and his ingenuity, in new creative channels. The man he might have been is emerging. When he forsakes his intellectual pretensions, as he seems to be doing, and finds adequate compensation in his skill alone, he will be a socially valuable craftsman of extraordinary skill, and quite happy in his new adjustment to society."

I began to understand. In the book I borrowed from Varsag, *"The Relation of Character to Neuro-Surgery"* by Dr. St. John Broome, R.F., F.O.S., B.A.R., I read of operational techniques which had had astounding results. There were many recorded instances of complete changes in personality, habit, disposition—all the attributes of the synthesis we call character—through the medium of surgery. The techniques ranged from removal of cerebral pressure clots to re-arrangement of synapses by predetermined plan. I was amazed to discover liberal quotations from monographs by Dr. Emil Varsag, Franz Varsag's dead brother, devoted to discussion of future possibilities in micro-neuro-surgery. Just as the various senses and other functions such as speech, memory, etc., were known to be localized in particular portions of the brain, so, he claimed, were many of the other, minor, characteristics to be found. Broome was inclined to discount many of Varsag's claims as premature, pointing out that he had not made the records of his experiments

available for checking, but he agreed in principle with Varsag's direction.

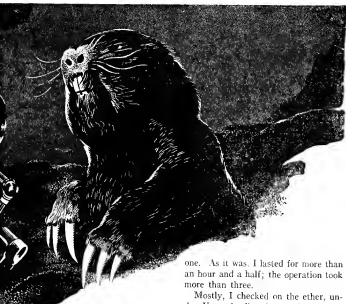
IT WAS too much for me. All I knew about the brain was that it was a handy thing to have, as witness Prager's life without one. In the time we had been at Woodbourne, Swift and I, playing three-handed klobbysch with Prager, had split some six hundred dollars of Prager's money. Our partnership was secret; the cards were marked; and Prager borrowed the money from Steiner at standard loan-shark rates, a fact which made Swift and me happy, contemplating the day when he would have to cough up the borrowed moola and interest to Steiner.

So it went for perhaps another week. There was a second midnight operation which I found out about only because I caught a glimpse of the Professor wearing a temporary bandage in the morning. When I protested to Varsag that I resented his secrecy, he explained that he had only wanted to spare me a sight which, by its unfamiliarity alone, might have ill effects on me, but he promised that I would be present at the main operation itself.

It came toward the end of that week. The spring trout season had opened and Steiner's cut-throats, grown restive, left for two days fishing upstate, taking Prager along. Swift and I watched them leave, and Varsag, who was standing nearby, caught my questioning glance and nodded. That night we drugged Swift's and the cook's coffee, and shortly after eleven, we gathered in the Professor's room, the four of us, and helped him arrange everything for the operation. Things like sterilizing vast numbers of instruments, preparing buckets, sponges, sheets, and so on.

"I'll need your help, Buzz," Varsag said, and together with a trembling, anxious Steiner, I scrubbed my hands





I sat there on a high stool,
under hot, bright lights and
watched a man's skull sawed open

and donned a surgical robe. Steiner kept flitting about, talking anxiously to the Professor. He was on the last lap of his carefully nurtured relay to crime unknown, and after weeks of planning and waiting, it seemed too much for him. The Professor was subdued, mildly interested, occasionally interposing a remark to Varsag concerning a sociological survey he had recently read. Varsag, his mind elsewhere, answered automatically while he methodically went about his business. And I? I felt like Dr. Kildare.

I regret to say that I passed out halfway through the operation. Save your aside remarks. It could happen to any-

one. As it was, I lusted for more than an hour and a half; the operation took more than three.

Mostly, I checked on the ether, under Varsag's direction, and now and then dumped instruments into the sterilizer or took them out. But I sat there on a high stool, under hot, bright lights and watched a man's skull sawed open. Trepan, the Doctor called it. He took the top of the skull off like you might a hub cap, and there was the shiny, wet with blood, pink and grey convolutions of brain. Cut followed minute cut and the flashing knife went ever deeper. Not a knife really; it was more a wisp of metal, frequently invisible to the eye, directed through a series of adjustable lenses held on wheeled legs over the brain. The tip of the knife was actually invisible, except under the micro-lenses.

I remember Varsag's coolness. Not a drop of perspiration was on him, though Steiner and I were drenched. I

could not see his eyes because of the shaded glasses he wore, but I had no doubt they were calm and humorous as ever; he made a few jokes during the operation, which I don't remember. He worked on tirelessly, pausing for brief moments to consult his huge, illuminated charts which hung close by, his hands in their transparent amber rubber gloves as fast and light as wind.

Somewhere around the middle I went. No particular reason, but the heat and the lights and the blood and the quiet, and, I guess, the idea of what was happening—anyway, I remember I felt the stool rocking under me and I called out, softly, "Steiner, catch me." I came to in an adjoining room and waited there until it was over. Varsag and Steiner carried the Professor to his room, Varsag smiling at me and remarking that I had survived, after all. The Doctor stayed with his patient all night, and until we fell asleep downstairs on a couch, Steiner and I sat up playing double solitaire and thinking our private thoughts. . . .

NOW the development of the Professor was swift. Change followed change with the dramatic sequence of a story. Watching him was like seeing a piece of fiction come to life, for there was something unreal in the way the changes came over him. I don't know how to describe it better. Like a man putting on a series of costumes and masks, strange masks that affected his whole bearing, that dictated his actions. Like a strip of film, say, of Spencer Tracy, turning from Jekyl to Hyde, with sudden new alterations from moment to moment. Not that they happened so quickly, but that was the impression it left.

We were more or less alone in the house now. Steiner had sent away most of his men, leaving only Flipper and

Harry, and even they were not around very often. Jimmy did the cooking and Prager did the housework, content that Steiner let him stay, for his curiosity, though hidden from the others, was devouring him. Swift wanted to leave, but maybe because he asked, Steiner wouldn't let him; maybe it was his increasing case of jitters. It was like a fever that ran through the house. Some nights I would wake up for no reason and hear noises that told me that we were all awake, listening to each other, listening for we didn't know what.

A few days after the Professor was on his feet, he changed his habits from that of a daytime to a nocturnal creature. He seldom went out into the warming April sun, and then only with dark glasses, bundled in his fuzzy dark coat, walking about in the mole fields. A little past ten o'clock at night he would eat his main meal, devouring enormous quantities of heavy food. Then he would sit with us for half an hour and retire to his room. Sometimes we would hear him working on the small lathe Steiner had installed for him, sometimes we would hear him patting down the hallway to get a drink, his footsteps soft and hurried. In the morning there would be minute shavings of metal that had fallen from his clothes to the upstairs ballway floor, so small that you knew they were there only because they crunched under your feet.

Then he began quarreling violently with Jimmy, the cook. If his food wasn't ready when he wanted it, or if it wasn't prepared exactly as he liked, he flew into a rage, shouting and screaming curses. Varsag understood it and told us that it was a peculiarity of the mole, serving to replace an outlet for the enormous energy he had developed, and which he might have put into his burrowing.

No one mentioned that. There was some silent understanding among us not to bring up the subject of this most natural, this great, instinctive drive of the mole, not even among ourselves. But we were all waiting for it. The expectancy lay in our minds like a dormant animal, a fierce but patient thing, waiting to seize the first sign of the beginning of the final stage.

One afternoon I walked into the kitchen and found the refrigerator open, and a trail of wet drippings, like a mixture of water and beef blood, leading to the cellar door. I had assumed the Professor was asleep upstairs, but with three pounds of beef gone, the indication was too clear to mistake. Not wanting to embarrass him, for he insisted on eating alone, but still curious about his taking beef to the cellar, I quietly went around to the back and looked into the cellar through one of the little windows.

The sun was shining directly down through the window. I might not have noticed the Professor at first, for he was sitting in the darkness of a corner, but the meat lay on a paper bag, and part of the bag projected into the sunlit area. The bag moved, and I strained my eyes and saw the Professor's hands tearing the meat. He was eating it raw! I must have made some slight noise, otherwise he would never have turned and forced himself to look up into the sunlight. His incredibly developed sense of hearing caught whatever imperceptible sound I made, and he thrust his head out from behind the shelter of a pile of boxes.

AT FIRST his eyes were closed. His mute, taut face was turned to me, and then slowly he opened his eyes to mere slits and he saw me. He jumped to his feet with a cry of rage and threw the meat at the window with such force

that it shattered, the splinters cutting my hand as I instinctively threw them up, I drew back and he was gone.

Varsag and Steiner, who were on the front porch, came running. Varsag cleaned the cuts as I told him what had happened. He said nothing, but later he warned both Steiner and me against provoking him. His fits of anger would pass soon, the Doctor said. He was beginning to eat even during the day, storing the energy he would soon call into play.

We made no attempt to find him, but that night when the Professor came downstairs for his dinner, as he walked through the living room to the kitchen, he stopped a moment before me. We had turned down all but one lamp when we heard him coming, but he still wore his dark glasses.

"I'm sorry about this afternoon," he said to me, his voice very low. "I'm really dreadfully sorry. I hope you weren't hurt."

When I reassured him, he went into the kitchen and we could hear him talking quite civilly to Jimmy. Jimmy soon left, and when the Professor finished eating, he came into the living room and sat down. In a gesture of politeness he removed his glasses, shielding his eyes with a hand. He seemed rested and at ease.

"Well, Professor," said Varsag, cordially, "how is it today?"

"Better, much better, thank you," the Professor sighed. "I keep wondering about your operation, however. For a mole, I eat like a tiger and I've the vision of a bat. I was thinking that if you'd changed me into a porcupine, I could make love to a cactus plant and never know the difference. Unless," he added, laughing softly, "I ate it first."

My first reaction to his words was shock. After such careful avoidance of the subject with him, to hear him

actually joking about it was startling and almost obscene. Steiner, too, seemed to have reacted as I had, but not Varsag. The Doctor cocked an amused eyebrow and a little smile played on his lips. "And your hearing?" he asked. "Don't you find that it compensates a good deal for your diminished vision?"

"It interferes with my sleep."

"You mean we make too much noise during the afternoon?"

"That depends on what you call too much noise," said the Professor. "This afternoon Swift woke me when he went to the upstairs bathroom."

Swift, sitting in a chair near the radio, sat up. "I beg your pardon," he objected. "I did nothing but comb my hair."

"That's it exactly," said the Professor, slyly. "You're losing your hair. I could hear them falling to the floor, like hailstones."

Steiner let out a howl and I couldn't help laughing myself. It drained me of all the tension that that day had brought, and though it lasted for an instant, I was grateful. But for all the Professor's light-hearted banter, his face was tightening again, and his feet were beating a swift, nervous tattoo under his chair.

"What about other things?" Varsag asked. "Surely there have been other manifestations natural to your new state?"

The Professor let his hands down and peered at Varsag, thrusting his face forward. He pointed a long, dirty finger at the Doctor and said, "Ah, Doctor, who's doing the digging now?" He bounded to his feet as if he had released a spring, and bidding us all good-night, he ran upstairs with a series of throaty chuckles trailing behind him.

Presently, Steiner said: "Well, Doc? Well? Does it figure?"

Varsag shrugged and sat thoughtfully for a long time. Soon we could hear the Professor's lathe spinning furiously. Swift turned the radio on low and after awhile one of our interminable card games began.

WE HAD been at it perhaps half an hour when the door opened and Prager came running in. He had been to the village to get some bottled beer, and he stood there, surveying us stupidly, the half case of beer on his shoulder. He looked at us again and put the case down, as if he had been on the verge of saying something and changed his mind.

"For God's sake!" Steiner exploded. "Say it, will you?"

"Nothing," said Prager. "When I seen the Professor in the village, I thought maybe you didn't know he—"

"You saw *who* in the village?" Steiner cried.

"The Professor. You mean you didn't know he was there?"

Steiner leaped up and ran up the stairs, with Varsag and me just behind him. He tried to open the Professor's door, but it was locked. From inside the Professor called, sharply: "What do you want?"

We stood there and as we heard the lathe whir to a stop, it occurred to all of us that we had heard the lathe all the time under the music of the radio. Steiner's face turned from astonishment to fury, but he kept his voice controlled. "You want some beer?" he asked.

"No." The lathe started again.

We went downstairs and Steiner took Prager by the lapels. "Where did you see him—in the bar you stopped in for a quick one?"

"That's it," Prager gulped. "I had just one. I swear I—"

Dr. Varsag caught Steiner's band before it could land. "None of that,

please," he said. "The mistake was innocent enough. It isn't the boy's fault if our reactions are somewhat exaggerated." He took Prager by the arm and led him outside. They spoke together for a minute or so, and then we heard them go walking down the road, still talking.

Steiner looked at me. "What the hell goes on here?" he said.

"Pixies," said Swift, sarcastically, and as Steiner took a step toward him, he reached for a poker and said, "You lay one of your hairy arms on me and I'll have your goddamn mole-man dig you a grave."

Steiner stopped dead in his tracks and turned to me again. "The whole house is crazy," he said, solemnly. "Pixies is just the half of it." He sank back to his chair and shuffled the cards. "The whole house is crazy, crazy, crazy," he mumbled. "My deal."

The lathe was still spinning when we went up to bed an hour later. Dr. Varsag and Prager hadn't returned.

I WOKE to find Prager standing beside my bed, shaking me gently. He turned on the night lamp and I saw that it was five past three on my clock. In the next bed, Swift sat up, blinking in the light.

Prager put a finger to his lips. "Shhh," he cautioned. "Get up or you'll miss it. The Professor's gone. He dug a hole out of the cellar and he's in it somewhere. Come on."

"I hear the lathe still going," said Swift.

Prager screwed his face up wisely and winked. "That's it. He used the lathe as a blind. I told you I saw him in the village."

I got into my robe and slippers and followed Prager into the hallway, Swift behind us. Prager tip-toed to the Professor's door and pushed it open, whispering

that he had picked the lock. A tiny light, dimmed by towels draped over the lampshade, showed us the unattended lathe still spinning away. The room was a mess, littered with scrap.

Cautiously, we went downstairs. I opened the cellar door and saw Varsag sitting on a box, with a couple of candles to provide a light. The Doctor scowled when he saw us. "I distinctly told you not to wake anyone," he said to Prager. "Now you'll all sneak back to bed. I can't have you here without Steiner. He'd be furious if he—"

All our heads turned together. We all heard the distant noise, like something scurrying, but with a hollow, far off sound. Varsag took one of the candles and moved it toward the nearest wall and I sucked in my breath. For behind the pile of boxes where I had seen the Professor that afternoon, there was a large mound of fresh earth, and just beyond it, a hole that gaped in the foundation wall and dipped away, a hole with a diameter of some thirty inches!

"Quick! Get Steiner!" the Professor ordered. "Before he comes!"

Prager backed away, his eyes on the hole, and ran upstairs.

I just couldn't believe it. "But how could he get through such blocks of concrete?" I breathed. "The stones . . . the concrete. . . ."

Varsag nodded, his face thoughtful.

"You forget this is not just a mole," he said softly. "This is a trained, cunning, superior human intelligence combined with the greatest natural burrowing instinct known. The combination is more than a match for anything mankind can produce." He moved the candle closer to the edge of the hole. The stoop showed evidence of great scratches, as if it had been torn apart by fantastic claws, by something

beyond our understanding.

A MOMENT later, Steiner came running down the stairs. He was barefoot and in his underwear, and he looked baffled and angry. He was about to say something when Dr. Varsag held up a hand. The hollow sound had echoed once more. Closer and closer the clawing, scraping noises approached, increasing in intensity, then suddenly they stopped. Long moments of utter silence went by, until Varsag muttered, "Perhaps he's afraid to come out because the light—"

At that moment several chunks of concrete from the opposite wall fell to the cellar floor. We turned in time to see the rest of the new hole being punched through, catching a glimpse of something that gleamed like dark blue metal as it whirled in a shower of sparks. Then quiet, and a moment later the Professor's head popped out and quickly drew back again. He was exercising the mole's caution about exits and entrances!

We watched the hole until the Professor's head appeared again. He looked out at us, his dirt-blackened face creased in a furtive but very friendly smile, and then he crawled out on all fours and stood up, arching his back and grunting amiably. He kept looking at us, still smiling, in the oddest mixture of pride and shyness, then he stroked his lips with a forefinger and asked, "Who found me? Come now, who found me out? I've a reward for him, you see."

I don't think he understood then why none of us could speak. For he was clad in a suit made of carefully sewn moleskins, reinforced with several thicknesses at the knees and elbows. Over his shoulders hung two long mole-skin bags, both so heavy that they kept him bowed. In the one that hung down

over his chest he had swiftly stowed the gleaming, claw-like tools we had glimpsed. Now he swung the other bag around and I swear I saw his ears move at the jingling sound the bag made, and he dug a hand into the bag.

"I know, I know," he said, slyly, pointing his finger at Prager and smiling. "It was you—so here!"

And when he opened the fist of his other hand, a shower of gold coins fell to the cellar floor, glistening with a dull, yellow brilliance in the candlelight.

I'll never forget the look that was on Varsag's face. . . .

OF COURSE, Varsag was wrong. We all were—then. Remembering how the Doctor was later to say to Steiner ". . . he's yours now, whatever you plan to do with him . . ." and remembering that we all had the same ideas about those plans, I realize that even at the beginning our thought was instantaneous and identical. And wrong.

The Professor had found the coins buried in a box in a nearby field. It lay in the path of the tunnel he dug to the village. The tunnel exited on the banks of a small local river; it was one of the Professor's earliest underground explorations, and he made use of it by going into the village bar. He liked to think that there was some useful purpose served by his work. It was something he had read in his borrowed books on economics—production for use—so he dug a magnificent tunnel nearly two miles long and used it as a private road to get a beer!

Oh, we found out a lot about him before Steiner took him over. He privately showed Varsag and Steiner the tools he had made, and Varsag described them to me with awe in his voice, but I didn't understand. He

had fashioned high test steel and various alloys into an array of miraculous tools, drills and torches so compact, so wonderful and unbelievable in their design and efficiency that even Varsag had not expected so prodigious a success. For this being of mole and man had developed a kind of mind that was beyond our comprehension.

I was there the afternoon he showed Dr. Varsag one of the tools in operation. He took his moleskin bag into a field, and from it he took out a pair of metal gloves—if I may call it that—which reached almost to his shoulders. An interior switch turned on a tiny motor, and four, curved talon-like spades began spinning with such speed that they were mere blurs. At the same time, flat, triangular sections of steel that reached from wrist to elbow began a powerful motion all their own, designed to pack the loose, dug up soil to either side of the swift blades. It seemed inconceivable that this instrument—but what's the use of talking about it? The Professor bent over and touched the ground. The spring hay flew aside in a hail of earth. . . .

In a quarter of a minute the Professor was gone, and where he had been there was a small mound of fresh, wet earth and a hole that was two feet deep before it curved parallel to the ground surface. A minute later, seventy-five yards away, the Professor came out of the ground and waved to us.

"It saves the wear and tear on our fingernails," he said later.

That was another thing about him, that use of the first person plural, like royalty, or newspaper columnists; take your pick. There was a strong, if sly, pride in his voice whenever he spoke of his feats, as if the entire responsibility for his achievements was his. And yet, he was closer to Varsag than anyone else.

It was Varsag, for instance, that he told of his plan to dig a tunnel into the Museum of Modern Art, or the Natural History Museum—he wasn't sure which. He wanted to burrow down the length of the state, under the Hudson, then downtown like a goddamn one-man subway and get in through the Museum cellar. Why? To make them an anonymous present of his battleship and glass house models. "They would be useful," he said the Doctor told me later.

He also told Steiner, and that ended the plan. Varsag had pointed out that the gift could be made via Railway Express, and that a tunnel into the cellar of a museum could hardly be enthusiastically received by the authorities. "But I would block off the tunnels later," the Professor explained. "They'd never know I got in through a tunnel." Steiner listened and observed that he had better uses for such energy and ingenuity and the subject seemed closed, though we all remembered the box and the coins.

THERE was some eight thousand dollars in gold in that box. It had been buried three feet underground, on land that belonged to the owner of the house Steiner had rented. But since none of the coins bore a date more recent than 1901, and since the box itself was lined with a newspaper from 1903, it seemed safe to assume that the gold had belonged to someone long dead. At any rate, Steiner would have confiscated it, if the Professor had not stolen it from him and buried it again, or said he had buried it again. We didn't know for sure, the way he spoke.

We had a nasty half hour the morning Steiner found the gold was missing, until the Professor woke up and confessed. "I want it," he said. "Gold is useful. I will find a use for it." So

Steiner, with other things on his mind, shrugged it off, and the Professor went back to sleep. In the cellar. He wouldn't sleep in a bed any more. He made himself a bed from bits of felt and crumpled newspapers and burlap and he slept in the cellar, just inside one of his tunnels.

It took a little while for us to grow accustomed to him, and all that time we knew that Steiner was getting ready to take over, and we were waiting. Steiner was as earnest a student of the Professor as Dr. Varsag. He learned the more simple peculiarities of the Professor's mind. It had changed, you see, in many ways. It had become more simple and more direct, for one. If the Professor wanted to deceive someone, he didn't lie or dissemble—he just kept his mouth shut and then did what he wanted to do. Where he had been cynical before, he was now sly, in an animal way; where he had been sophisticated before, he was now wary. And though he was in many ways independent, he developed a need for discussion about himself and about matters pertaining to him.

Varsag patiently explained everything. When one of the Professor's tools betrayed him one day, and he bored through into an underground stream that flooded his tunnel and almost drowned him before he escaped, Varsag reassured him that it was not his judgment that had been at fault. He explained his past rages, now very rare, and explained why the Professor's hearing was so acute, and numerous other minor matters.

Day after day, night after night, with only brief intervals for sleeping and feeding, the Professor perfected his tools. During this time he constructed an elaborate series of underground chambers, and at the Professor's request, he enlarged some of his tunnels

and chambers so that Varsag himself was able to crawl down into them. It was a great concession, and when he offered me the opportunity to go down, I was at once overwhelmed and very grateful.

What can I say that would give you an idea of what it was like? It was like being an underground animal. It was a glimpse into the life of something so alien, so far removed even from the imagination of a normal human, that I left his chambers cool with fear. They were marvels of engineering, perfectly ventilated and drained, with innumerable side galleries running off to unknown places, with a dozen exits and entrances and caches of food and drink to appease his enormous needs. Swift and Prager were with me, and it affected them much the same.

IT was that same day that Steiner made his first move toward beginning his own plans. If he had been disturbed by the Professor's increasing closeness to Varsag, this new display of friendship for the rest of us was the finishing touch. And, having also seen what the Professor was now capable of doing, he thought his time had arrived. Dr. Varsag agreed. He had been on the verge of making the same point.

"My work with him is finished now," he said. "He's yours now, whatever you plan to do with him. But only upon one condition; that if and when the time arrives that you are through with him, when you have no further use for him, you will allow him to return to me."

Whatever Steiner thought of this strange condition, he accepted it. He was a different Steiner. I knew that, and knew that it was due to the weeks he had lived with Varsag. You can't live with a man like that and not change

in some ways. He had learned what it was to respect a man for himself, for his ability, for his opinions, for his word, and not for the gun he carried, or the men he could hire to kill you.

The old Steiner might never have let us leave that farm alive, once he had what he wanted. The thought had been with me several times, but Varsag had brushed it aside when I spoke of it. And he had been right. The new—or slightly altered—Steiner not only let us go, but provided other surprises. He took the Doctor's word for his responsibility that nothing of what had been done there would be revealed by any of us. In parting, he gave Swift and Prager five thousand dollars each, to compensate them for their semi-captivity and bribe them to a silence which Varsag's word had already bound them to keep.

I don't know what he offered Varsag, but Varsag didn't accept it. He told me to keep whatever remained of the money he had given me. I had drawn against it both for him and myself, leaving some fourteen thousand dollars. At the end of the month, when my bank forwarded its statement, I discovered that either he or Swift's pixies had deposited exactly enough to bring my balance to an even fifty thousand dollars. The generosity behind that action floored me, but that was because the month ended a week or so after we left, and it was a few days before I understood his motives. Generous, yes. But he thought he could afford it by then.

Somehow, it was a sad business, that leaving. The Professor was asleep, and Steiner wouldn't let us wake him to say goodbye. It was the end of April. The wind blew through the bright, fresh green of the fields, and birds circled in the sunlight. The countryside was quiet and at rest. We were all tanned

and in better health than some of us had been in a long time. When, just before we left, Flipper and Harry drove up to the house on one of their rare visits—Steiner had sent them to the house down the road to live the last few weeks—it forcibly reminded us that the business that had kept us there had not been meant for our health.

As we drove away, Varsag, beside me, said quietly, "And now we will wait. How long will it be? . . ."

I DIDN'T know what he meant, but when I did, it was some days later; just about ten days. The headline was just a double column on the bottom of the first page, but the story was interesting.

MERCHANTS TRUST CO. BANK ROBBED. LOOT ESTIMATED AT NEAR \$100,000

*Scientific Burglars Dig Tunnels
From Vacant Store On Same Block*

NEW YORK, MAY 4 (UP).—A crew of burglars with the patience of saints and the conscientious precision of engineers robbed the Merchants' Trust Co. Bank Canal Street Branch of almost \$100,000.00 yesterday, between the hours of closing and opening. Police officials who quickly traced the robbers' path stated that the robbery had been carefully planned and executed with supreme skill and efficiency.

Starting from their concealed headquarters in a vacant store at 5518 Canal Street, the burglar spent weeks carefully burrowing a tunnel for some hundred yards and passed under several other stores before they pointed their drills and torches upward. There they met blocks of concrete and vault steel, but neither of these . . .

And so on, as you may remember; I

won't bore you with it. The police were amazed, were investigating store owners and patrolmen, were at a loss to explain, were assigning detectives. No fingerprints, no clues, nothing—nothing but two feet of porous concrete and eight inches of ventilated steel, and a tunnel straight as an arrow. Big things expected to develop momentarily, however. What a laugh!

I was at Varsag's house half an hour after I saw the papers. He had seen them already. He invited me to share his late breakfast, his voice subdued, his manner reflective. I sat there sipping coffee, waiting for him to say something. He let me wait until he had finished the last of a mountain of marmaladed toast.

"Well, my boy?" he said. "You're upset, aren't you? You're sure this is the Professor's work."

"Aren't you?"

"Half and half," he said, taking one of my cigarettes. "It might just be a coincidence. However, I am ready to accept the alternative that it was Professor Lightfingers."

Slowly, I said, "Then you think . . . you failed?"

He tapped the newspaper. "Does that sound like failure?"

That startled me. "You know what I mean, sir," I said.

"What would you have me do? Shall I call in the police and tell them I think Professor Arnold dug that tunnel because of an operation I performed on him?"

"No, not that, exactly. . . ."

"Then what, exactly?"

"I—I don't know. Maybe all I wanted to hear was that you're worried . . . that you . . ." I think I must have been staring at him.

"That I am about to take poison, perhaps?" He snorted impatiently. "Certainly not! Failure? Certainly

not! You can't expect a man to shed the habits of a lifetime like a coat. If you broke your leg, you wouldn't expect to walk the moment it was set in a cast?" He got up and came around to me, putting a hand on my arm. "But it's not him you were thinking about, was it? You really were worried about me. You're a good lad, Buzz. I appreciate your concern. As for this story, let's wait until we have something more we can go by."

SO that was the way we left it. I didn't understand something in the Doctor's attitude, but I tried not to let it bother me. But a guy like me, used to feeling little things like that, the intangibles in a conversation, in a glance, in the tone of a voice—a guy like that can't just keep blinking. Something more to go by? We got those somethings more, plenty of them, in the next few days.

On May fifth, the Farmers' Exchange Bank on Fiftieth and Broadway was burglarized to the merry tune of \$160,000, with two-foot holes in steel walls and no tunnels. On May 7th, the Bronx County Bank lost \$70,000, with several small tunnels. On May 10th, the Highland Trust Co. was robbed of \$210,000, with one tunnel nearly three hundred yards long, and drainage arranged for Miller Creek, which was near the tunnel. By May 18th, ten banks had lost close to a million and a half dollars.

No peanuts, brother. The police went crazy. They raided every hangout and fence and hotshop in town, and the F.B.I. came in because of the Federal Reserve Banks included. The newspapers turned out editorials you could bear sizzling. Weeks of preparation, like they'd said at the first robbery? Hah! If that was true, there were six hundred skilled yeggs operating around New York, and that was a bigger and

crazier crime syndicate than even the movies dreamed about. So what was the answer? They had runs on a dozen or two hanks. What was the answer?

Steiner could have told them, but Steiner wasn't around. Varsag knew, but he had disappeared. He'd been gone for days, ever since that first robbery. He came in once and I got him on the phone, but he was in a hurry and couldn't talk to me. "Don't worry and whatever you do, don't say anything about it," he told me, and hung up. I guess the cops must have thought of the Professor long before, but where were they going to find him?

Then, late one night, Steiner came to my place. A crazy, wild-eyed Steiner, alone. When I opened the door he ran in and grabbed my arms and kept saying, "You've got to find him for me, Buzz! You've got to find him before I go out of my head!" He was trembling like a leaf.

I sat him down and poured him a stiff drink. He hadn't shaved in days, his shirt was dirty, he had deep, hollow rings under his eyes. When he'd steadied a bit, I asked him who I had to find for him.

"The Doc! His hutler keeps telling me he's out of town!"

"I don't know where he is. Why do you want him?"

"It's the Professor! I can't stop him! He's knocking off every hank in New York and burying the money someplace! I can't stop him and I can't get the money and I can't find Varsag! You got to find him!"

That almost floored me. I took a drink myself, and gradually I got the story out of him. He had brought the Professor closer to the city, at East Islip, Long Island. After a few days, during which he got up a list of hanks and informative details about them, he had let the Professor try his hand. The

first one had been out on the Island. It hadn't attracted too much attention from the New York papers, for several reasons. One was the comparatively small take—\$35,000, or just about what Steiner had added to my hank balance—and second, the job had been done with a minimum of damage, and all tunnels well concealed.

The robberies we knew about had followed. The Professor had dug tunnels into the city like traffic arteries, and night after night he plundered hanks. But he never returned with any of the money, and he refused to tell Steiner what he had done with it.

"A million and a half!" Steiner groaned, his great eyes wild at the thought. "I never saw a cent of it. He keeps burying the money!"

He had tried to confine the Professor, but he might as well have tried to bottle a plague. The Professor turned the house into a Swiss cheese. His tools were secreted everywhere, and he dug through floors and walls, and when he reached his hidden caches he picked up his other tools. He had exhausted Steiner's list, and then, from the way he went at other hanks, he must have torn a new list out of the Red Book.

STEINER had never killed a man himself—he had always hired his executioners—but three nights before he came to see me, he had resolved to kill the Professor the next time he saw him! He saw him that very night, but in the interim something new and terrible had happened, something Steiner had tried to stave off. His men, now left out of what was going on, nevertheless knew enough to guess close to the truth. They had descended on him, accusing him of holding out on the colossal fortune he was reaping. In vain his story, his pleading. He had taken his last opportunity to escape and brok-

en away from them that night.

He had run through the fields to one of the Professor's exits he knew about, and he had waited there until dawn, when the Professor found him. And there he had pleaded with the Professor to hide him.

For two days and nights, Steiner the mighty had lived in an underground chamber, sleeping on rags, eating whatever garbage the Professor brought back from his forages, content with the leftovers! And finally, sick and feverish from exposure, half starved, frightened out of his wits, he had gotten up courage enough to sneak into the city to seek out Varsag. Now that Varsag's butler had told him the Doctor was out of town, he had come to me in desperation, not knowing where else to turn. The great Steiner, his clothes thick with mud and evil-smelling, his heavy lips quivering, his eyes searching every corner.

"Help me, Buzz, help me," he begged. "I was good to you when I had it. Get to Varsag and call the Professor off. Help me . . ."

I was afraid to keep him at my place, so I got a cab and took him to Swift's home. We let him shower and fed him, and after reassuring him, we gave him some sleeping tablets and he finally dozed off. And then I told Swift everything that had happened. He hadn't asked a single question when I brought Steiner in.

When I was through, he looked at me without saying anything and went over to his phone and dialed a number. "Hello," he said. "This is Larry. Buzz Rogow is here. Something's up. Come over right away." He hung up and as he walked back to me, he said, "Varsag never left town. He's been in his house ever since we got back from Woodbourne, and he's been seeing the Professor almost every day."

It didn't make sense. It was insane. He was wrong.

He shook his head. "Funny," he said, with a tight, bitter smile. "Here I've been going along, reconciled to the fact that I'm one of the largest Simple Simons in modern history, and at this late date I find my rivals in such clever lads like Steiner and you. Am I the reincarnation of Sherlock Holmes, or what? Hasn't the solution impressed you as elementary, Buzz Watson?"

"For Christ's sake, forget the stylish speeches! What is it?"

"Varsag's got the money."

"You're crazy!"

"Why?"

"Because—because Varsag's not that kind of man! What makes you say a thing like that? How do you know Varsag's home? How do you know he sees the Professor?"

"That was Prager I just phoned," said Swift. "Suspicious, curious Prager, who's been haunting Varsag's house since we got back, who's shadowed everyone who went in or out of that house—just one person, Meadows, the butler. Meadows takes a cab downtown every day to the West Side Receiving Market. He buys on an average of ten pounds of meat a day. For whom? For himself? For his pet canary? For the Doctor's animals? That food arrives in a truck, twice a week. It isn't choice beef or the best steaks money can buy. Who eats *that* food? Who in this whole wide crazy world eats like that except the Professor? And is the Professor coming to Varsag's house—I don't know how, but probably through his tunnels—does he come there to chat with the butler? Is there the slightest shred of evidence except the butler's word, that Varsag ever did leave town?"

HE stood at the window, waiting for me to speak, and when I was si-

lent, he went on. "After all, none of us knew exactly what Varsag was doing to the Professor. They were together constantly. Even Steiner got to be afraid of their friendship, and the Professor's great dependence on Varsag. I had my ideas, but I kept quiet about them. When Stash turned up with his news a couple of weeks ago, I wondered about it but I still kept quiet, not knowing what to make of it. But this, what you've just told me, this *really* makes sense. It's one plus one, minus Steiner, and it adds up to Varsag getting everything. Figure it out."

I figured, but I couldn't get it. I was like a guy with a hard problem, with elements he couldn't understand, but who had the answer and was trying to force his inadequate figures to give him the answer he already knew. Because I had the answer, you see. I knew, with the complete certainty of, say—if you can stand another image, I was as certain as a sleepwalker is of his footing—that Varsag had done no such thing. I started with the premise that Varsag was honest and decent and incapable of such an action, not with the facts, whatever they were. If the facts didn't supply my answer, the facts were wrong.

I said so even after Prager arrived and substantiated everything Swift had told me. Maybe Varsag was home and had been there all along. There was still an honest answer. The facts were misleading.

"You remind me of something funny," Swift said. "You remember the Marx brothers in 'A Day At The Races,' I think it was? Groucho is a horse doctor and a woman comes to him with her x-rays. He tells her her leg is broken, and she waves the x-rays in his face and shouts that the x-rays shows something entirely different. Groucho, completely at ease, haughtily says to her: 'Madam, who are you go-

ing to believe—me, or those crooked x-rays?' And that's what you're saying, Buzz."

I picked up my hat. "If I know Groucho," I said, "that woman had a broken leg."

"Where are you going?"

"To Varsag."

"Wait for us!" Prager screamed. "Remember, I told you!"

CHAPTER VII

IT was past two o'clock in the morning when we got there, I rang the bell for a minute before the little door window opened and Meadows' face appeared framed in it. Before he could say a word, I reached in and grabbed his under lip with my thumb and forefinger and pulled on it. "Open the door," I said. He opened it. Try it and you'll see why.

We slammed the door into him and knocked him against the wall.

"Where is Dr. Varsag?" I said

For all his size and macabre appearance, Meadows was a lamb. He was frightened stiff. "In the study, sir, expecting you," he gasped, "but these other gentlemen—"

"We're no gentlemen!" said Prager, gruffly. "Stand aside!"

"Did you say the Doctor was expecting me?" I said.

A door opened down the length of the dimly lit foyer and light poured out of the study, outlining Dr. Varsag as he stood there. "Didn't you get my message, Buzz?" said the Doctor, coming toward us. "I telephoned you several times hours ago, and then I called your building and left word for you with the doormen." He looked at us and at Meadows, saying, "But if you didn't get my message, why did . . ." He broke off there, sensing what was wrong, seeing the coldness on Swift and

Prager, seeing how frightened Meadows was. "Come into my study, gentlemen," he said, leading the way.

When we were all settled, the Doctor asked, "What is it?"

I started to tell him, but even at the start I knew I had been right, and it made talking difficult. I told him about Steiner and what Prager had told us, and all the time I kept trying to make it sound as if it wasn't suspicion or mistrust that had brought us there—as certainly it wasn't in my case. I tried to tell him that we had come precisely because we knew there was an answer, and that he would tell us if he thought it necessary, and that Steiner's predicament had been the chief cause of our coming.

I didn't fool him. He listened to me gravely, tugging at his beard, playing with his glasses, occasionally letting his eyes wander from one to another of us, and when I was through, I knew he had it all worked out in his mind. I had seldom been as grateful to his intelligence and acumen as I was then; it would have hurt me deeply if I had thought he believed me guilty of entertaining such thoughts about him.

"I see," he said, quietly. "I'm glad you're all here. We've been in this thing together all along, and it's fitting we should be together in it now. As a matter of fact, it was my intention to send for you as soon as Buzz got here." He hesitated a moment, then said, "The truth is, gentlemen, that I've preferred not to be at home to callers precisely because the Professor has been coming here—and because I do have the money the Professor's stolen these past weeks."

Complete silence followed. I met Varsag's gaze momentarily. His eyes were clouded, his face sober and careworn. He was fully dressed, I had noticed, though it was long past his usual bedtime. After a moment he be-

gan to speak again, his voice as calm as before. For the first time, Prager and Swift heard of the previous operations Dr. Varsag had performed on the Professor, the ones calculated to change his habits and personality.

"That my work was successful then, I had no doubt, nor do I doubt it now. I never believed it was possible to achieve a complete change in him from the outset; that would have been foolish. I did believe that I could produce enough of a change in him, even from the beginning, that for all the persistence of his past activities and the influence of Steiner's direction, he would not be dangerous to society during the period of his acclimation to his new personality and interests, as well as his new abilities.

"With that in mind, I first won his friendship and respect. I lent him books to read, and had long discussions with him, and he was fertile ground. From the very beginning, his inclinations changed. He became interested in helping society, instead of attacking it. He built a model house and wanted to present it to a museum. When he discovered a buried hoard, he refused to give it to Steiner, but hid it again until such time as I could safely take it in my luggage when we left. His first thought was always to find some constructive use for what he was able to do. It still is—"

"What's constructive about knocking off banks?" said Prager.

VARSAG shook his head. "Nothing, of course. I'm glad to see that you agree with the rest of society about that, Prager, but unfortunately, the Professor doesn't. For two reasons. The first is that he has been reading things that are really too much for him. His simple, direct mind cannot fathom most of the works of economics be's

read. He isn't equipped—now, more than ever—to deal with abstractions. A discussion about the necessity to produce for the good of society leaves him with vague notions and a slogan. He thinks these things out, and he is conscious of his power, and he decides to do something. Somewhere, it seems, he read of idle capital lying in banks, contributing nothing to the general welfare—”

Swift interrupted. “Dr Varsag, are you trying to tell us that he’s been stealing money to keep it from being idle?”

“Exactly. He planned to distribute the money as soon as he stole it. Not with any very definite plan, I’m afraid. He told me he would give it to the poor, in person, perhaps, or by mailing it to charitable organizations. He wanted to build hospitals, cooperatives, factories run by the workers. I knew it would be useless to try to reason him out of trying to achieve these commendable ideals with stolen money, so my emphasis was on practical difficulties. I took him out one night and let him give a man a ten dollar bill. The reaction—the man threw the money down and yelled for the police—convinced him. I told him that charities would react the same way. And I pointed out that building hospitals and factories called for many times the money he had.

“You may say I was thus encouraging him to go on robbing, and from a legal point of view you are right. But there are other aspects. The Professor is an incredibly valuable human to society, or will be when he stops his marauding. That he will stop I am positive, absolutely positive. He is still acting on vestigial impulses from a former self that never hesitated to rob, and his present muddled self has not helped him much. But his instincts are fundamentally sound. You know he

never brought a cent of his loot to Steiner. He brought it all to me, because he trusts me, because I have said I will help him distribute his money.

“I have every dollar he has stolen. It is safely hidden in this house, waiting for the day when the Professor emerges fully as a new being. That day I will return all of it, taking the full responsibility upon myself for everything he has done.

“You may remember the agreement I made with Steiner—that if the time came that he was through with the Professor, he would allow him to return to me. I had no expectation then that he would come to me from the beginning, though I foresaw Steiner’s difficulties. From what you’ve told me, Steiner thought of killing the Professor first, but it does not matter. He has now given me the Professor of his own will . . . at a time most critical . . . most dangerous. . . .”

As the Doctor finished speaking, his voice dying away, the total effect of his words had been so great that none of us at first paid too much attention to his last few words. There was just a vast quiet.

Presently Swift said to me, faintly, “Buzz, that woman should have listened to Groucho.”

I was looking at Varsag. He didn’t seem to be listening to us.

“Doctor,” I said, “you said this was a dangerous time. Is there something you haven’t told us? Something connected, perhaps, with the coincidence that you sent for me earlier—”

Varsag put a finger to his lips, silencing me. I too had heard the sound, a light tap-tap-tapping with a metallic ring. Varsag walked over to the radiator and tapped a letter-opener on it in answer. Then he came back to us and said, “It’s the Professor. He’s in the cellar, and now that I’ve answered him,

he'll be up directly. You'll see what I was about to tell you."

THE Doctor turned down half the lights and we waited. Half a minute later, the great study door slowly swung open and the Professor's head popped into the room and popped right out again. Ten seconds later he repeated the process, and then slowly, in response to Varsag's call for him to come in, he let his head past the door, looked at us, then came in with two or three nimble steps, softly closed the door and kept looking at us.

"Hello!" he said brightly. "Hello! Hello! I'm glad to see all of you. Glad to find you here. News for you—dear Ira's disappeared! Left him in a nest last night—this morning?—tonight? can't tell time much these days. All the same down under. Gone when I got back. Disappeared! Had a horrible lot of food for him, too."

Then he unslung the several moleskin bags that hung from his shoulders, weighing him down, and placed them gently on the oriental rug. He stuck his hand into one of the bags and began piling up a small hill of currency, humming a little tune as he worked. He was wearing his dark glasses and the moleskin suit, which was utterly he-draggled, and he had forsaken his shoes somewhere, wearing pointed elfin, soft sandals. When he had taken out all the money in the bag, he took two handfuls of packaged currency and came to us.

"Here!" he said, throwing the money to us. "Use it wisely! Use it. Don't let it lie around. Do good with it!" He grinned at our bewilderment. "Wouldn't have given it to you another night. Had to save it all, let it pile up until there was a lot, then do what I wanted. But not now. All the money I want now. Just go and take it."

I caught Varsag's slight motion and

the nodding of his head, telling me to draw the Professor out.

"All the money you want?" I said. "Where is it?"

"Fort Knox, Kentucky."

"WHAT?" I shrieked. "WHAT DID YOU SAY?"

I almost blew him off his feet. He jumped back and lowered his chin to his chest, eyeing us carefully. "Fort Knox!" he said quickly.

"Butbutbuthut why? Whatwhat what do you want from FORT KNOX?"

"Don't you know there's money there? Twenty billion in gold!"

I took a firm hold of myself right then and there. I was just saying absurd things, asking absurd questions. I dug Swift's arm out of my stomach and helped Prager off the floor back to the couch. We all held hands and breathed deeply in unison, the Professor regarding us in mild astonishment. When I thought my hands were steady enough, I took out my cigarettes and tried to light one. I got it done only because Swift held my head steady and Prager lit the match. Then I helped them through the same routine and we sat there, smoking away as though our lives depended on it.

"It's not a good idea," said Prager, finally.

"Why?"

"They'll arrest you. Don't laugh! You won't be dealing with a police force there. That's Washington. They'll get the army after you."

"Please shut up," I begged Prager. Too late, I saw.

"Will they follow me underground?" the Professor grinned. "You're all wrong. What's government? Money! Who controls the gold supply controls the currency value. Controls economic stability! If I get all the money, I won't return it until they do what I say! Pro-

duction for use! No gold lying around! No idle—"

"But it weighs thousands of tons!" Swift interjected.

"No hurry. They can't stop me. They can't hide it. I'll eat it out from underneath. Won't even notice it until I've got most of it. Don't think they count it every day, do you?"

"But it's kept in chambers—" I started to say and stopped. I'd been about to say it was kept in chambers of the toughest steel imbedded in huge layers of concrete. I finished, "—in chambers guarded by an elaborate alarm system, with underground rivers all around it. . . ."

He was grinning. Just standing there and grinning.

BUT we kept after him, Varsag and I, trying to talk him out of it. I could see what Varsag's see had been until now; he had simply stalled for time, inventing whatever slight pretext came to mind to keep him from leaving for Fort Knox. Tonight he had a new one—he was trying to interest the Professor in knocking off the Manhattan Savings Bank! I tell you it was weird sitting there and listening to Dr. Varsag calmly, reasonably discussing the merits behind his idea of having that bank robbed, hearing him comment on such matters as burglar alarms and capital known to be on hand, and the value of more practice before he undertook something as great as the Fort Knox repositories.

The Professor interrupted only once, lost in his own thoughts. He glanced at Swift and said, "Tons and tons of money, eh? Mountains of it?" Then he added, roguishly, "That's making mountains out of a mole, isn't it?" That, and his proud grin, was all he offered in rebuttal.

After awhile he yawned, got up and

painfully stretched his back, making odd little sounds. Without another word, he picked up his bags of tools, leaving the money behind, and walked out of the room.

"He's gone to sleep," said Varsag. "In my cellar, probably."

"As long as he stays there."

"Yes, Buzz, but how long will he stay there? You know the way he behaves. He doesn't say anything, he denies nothing—he just does what he pleases, whenever he pleases."

"We might try trussing him up, even chaining him, unless . . ."

"Unless what?" said Varsag. "Unless I was afraid of the effect it might have on him? It might very well wreck his orientation beyond possible repair. I'm well aware of that. Yet, in view of his latest aberration, I would take the chance if I believed there was any hope of tying or chaining him. You don't believe me?"

"Let's say I don't agree with you, Doctor," I said. "There must be some way of—"

"Listen to me," said Varsag, soberly. "You're not dealing with the Professor any more. In him you have a new being, with the strength of twenty men, with the agility of a cat, with the cunning and instincts of a highly intelligent animal. Force alone would have to be of such an overwhelming nature as to pin him for the long minutes necessary to apply your complete bonds, which I doubt possible. And to—"

"We might sneak up on him, catch him unawares," I interrupted. "The element of surprise. . . ."

"I was coming to that. There is no such thing as finding him unawares. He lives in a state of perpetual alarm. His hearing is so fantastically acute that no sight could hope to match it. But suppose you could catch him—then what? He could snap ordinary bonds,

even of stout rope, with scarcely much effort. And chains have to be anchored somewhere. Don't think of him as being completely dependent on his tools. His hands alone, added to his mole's understanding and intelligence, could probably undermine or uproot whatever anchors we devised."

The Doctor nodded grimly. "So you see the extent of your problem. I've thought about it before, and the meager chance of success it offers weighed against the possible harm that an unsuccessful attempt might do—well, I decided the best, and in fact, the only, chance of restraining him lay in trying to reason with him, to offer him new goals, to postpone his plan. But that's what I wanted to see you about. It was my hope that you would help me, if you could . . . if you will. I don't know if I am acting wisely."

"Do you want my opinion, Doctor?"

"By all means."

"I am not debating the wisdom of your choice, but if the choice were mine, I'd use force. I'm not sure how just yet. Maybe we could stun him, hit him over the head—we might even try chloroform if we got him down. Or you might try inducing him to undergo another supposed operation and anaesthetize him. Then we'd chain his wrists and feet and waist—fifteen separate chains if necessary—and then we'd all take turns on constant guard duty, twenty-four hours a day. How does that sound? Is there anything to talk over in that idea?"

Well, it sounded fine, and we did talk it over. We planned the operation scheme and two alternatives, only we never got a chance to try any of them. Because that night was the last time we saw the Professor until it was all over.

The next day—that was the day the papers ran the story of the Midtown

Citizen's Bank having been robbed of \$80,000 the night before—the three of us temporarily moved into Dr. Varsag's house, ready for the first opportunity. We told Steiner the bare outlines of the Professor's project, and, probably due to his weakened, hysterical condition, he passed out cold. Later that day I went to the bank and withdrew an even twenty-five thousand dollars and gave it to him. Then I got a private ambulance to drive him to LaGuardia Airport and bought him a ticket to Quebec. The last I saw of him was a minute before the plane was ready to take off, its last announcement made. The ambulance doors opened and he streaked under the promenade and into the plane.

I had returned the compliment.

I didn't dream that in a little while I would be following him.

THE work the Professor did to get into the gold chambers of Fort Knox is a matter of record now, yet I wonder whether anyone who never knew the Professor can really understand what happened to him during that epochal achievement. I based part of this recital on my own familiarity with him, and partly upon what he later told Varsag, who, in turn, told me. Those were the darkest days, of course—but I will come to that presently.

The Professor left for Kentucky that next night. He took a private room on a sleeper. Ten miles from the gold chambers of Fort Knox he entered the earth. Fired by the magnitude of the task before him, he worked steadily for three days, with no sleep, with no food, with nothing but rare pools of water to refuel the prodigious energies that went into his furious labor. The galleries, drainages, miles of main and subsidiary tunneling, the ventilation and dirt disposal, are considered one of the

truly great engineering miracles of our time.

I can see him when, at last, he was ready to bore through the main protective walls. His keen ears heard every footfall above the roofing of his tunnel, no sentry's turn unknown, no rolling wheel a mystery. He fumbled in one of his bags and brought out a small torch, to which steel was like wax. A flick of the wheel, sparks from the flint, and the torch was ready! In the steady, yellow-blue flare of light his face was an eerie mask of fatigue, a little, half-blind man in a suit of moleskin, hunched over, following the path his torch cut for him.

His muscles rebelled as the hours went by, but he forced their obedience. His face was inflamed from the searing heat of the torch. After the first steel walls, there was concrete again, and the pulverizing, swirling white clouds of dust that flew from his drill stabbed his tortured skin like thousands of daggers. Steel again, and concrete again, and steel again. And weariness sweeping over him in waves, his tools falling from limp hands, his eyeballs like live coals, his face a mass of torn blisters.

And then the flame whistling hollowly as he holed through! He crawled through and lay down, then crept about the vault until he felt the great steel doors. He tapped his tools on the floor faintly, and the echoes described the vault to him, its shape and dimensions. He found huge lockers filled with currency, incalculable fortunes in gold certificates, but worthless to him in his quest for bullion. Hour after hour he bored through the vaults, finding nothing but currency or small piles of bullion.

He had nothing to guide him, for there was no instinct to lead him to gold, and his only recourse was to keep going on and on, through cham-

ber after chamber. No one knows how many hours he spent in his huge concentric circling of the inner vaults, but when he had been underground for almost seventy hours, he was completely drained of energy.

The chamber was comfortably warm. Hand over hand he dragged himself to a corner. He broke open his last steel locker, and currency poured over him. His brain was lost in clouds of fatigue, his body was numb. Some last warning instinct whispered to him to go back, and he tried. . . .

Guards found him the next day, curled up on loose bunches of gold certificates, as if they were a nest.

CHAPTER VIII

THE rest of this story isn't mine. It belongs to Dr. Varsag and to the Professor. I wasn't there when it happened, and I didn't know it was over until long afterward; weeks, I guess. But since I've told you this much, I want to tell you the rest. Especially because of the Professor.

The papers, you know, didn't learn about the Professor having been found in the Fort Knox vaults until several days later. We knew before they did. The F.B.I. and the Treasury Department's Secret Service came in and battered their poor heads against the problem, and the first break came when the Professor finally spoke, asking for Varsag. So, quietly, the F.B.I. and the S.S. called on the Doctor.

We were still living in his house, waiting for the Professor in forlorn hope, when they came. It was dinner time, and that alone saved us. For Varsag, excusing himself, came back into the dining room told us instantly that the appalling worst had happened, and led us to the door and escape with apologies which the agents could hear,

as if we had been casual dinner guests from whom he now was forced to excuse himself.

I don't know what he told them, but he stalled them long enough for me to withdraw the rest of my bank balance the next morning, and by afternoon, Swift, Prager and I were on our way to Montreal. It was the first and quickest way out of the country.

Perhaps we shouldn't have gone. I felt that we were deserting Dr. Varsag, but there had been no time to argue and he had disposed of us swiftly, while we were still bewildered. We talked it over that night, waiting for the bank to open, and in the end I suppose it was Prager's walling as much as anything else that decided us. We were afraid to allow him to remain in the country, and afraid to let him go alone. And, sentiment aside, at least for me, Dr. Varsag was right. He said there was nothing we could do for him, and that we risked being involved in a matter which we could only complicate.

And he was right again. Two days later the story broke in the papers. Nothing about Dr. Varsag or Steiner, or any of us—indeed, from the beginning to the end, until it was long over, our relation to these events, including Steiner and Varsag, remained a carefully guarded secret of the government. For when the story of the Professor having been found in the vault broke, Steiner's old gang blew everything they knew to the F.B.I. They were immediately sealed in the can as material witnesses under bail totaling half a million, and the hunt was on for Steiner and the three of us.

Very quietly. Without any warrants being issued. Without a single *Wanted* poster printed. But they were after us and we knew it. They were out to build up a case against Dr. Varsag and they realized what they were up

against. Steiner's old gang weren't the kind of witnesses they could do anything with—they didn't know anything except that Steiner and probably we three knew everything. We hoped Steiner was safe, and we made sure we were. We bought second hand fishing clothes and a rattletrap and went deep into French Canada, to a little hamlet on the coast.

We stayed there until they found us, and we were half glad they did. At times we had thought we would spend the rest of our lives there. Prager married a cute, fat little girl and went out herring fishing with her old man, and adopted the elegant name of Stanley. When Swift and I weren't visiting him, we were discussing plans for getting away to South America. And we might have gone if they hadn't found us.

But I'll tell you about the Professor and Dr. Varsag. . . .

THEY didn't do anything to him at all. They had their plans and they waited while they searched for us. They issued no statements and contradicted no theories. There were items in Broadway gossip columns and Washington dope columns that the entire Fort Knox story was a fake. There were other stories that it was all true, and the Steiner gang was being held as accomplices as well as material witnesses—though they never were called the Steiner gang; his name was never mentioned. The F.B.I. went about its business, saying absolutely nothing, waiting.

Of course they tailed Dr. Varsag and they tapped his phone. He had gone with them to the Federal jail in New York where they brought the Professor, and after that first time, he visited him frequently. The F.B.I. put no obstacles in his way. Varsag knew they had the cell all nicely wired for sound, but they

never heard anything he wanted to keep secret. Interesting, the way he did it. He merely breathed his important questions, and the Professor's wonderful hearing did the rest. He could generally answer by either nodding or shaking his head.

You see, the Doctor was waiting too. He had not admitted anything, and the Professor had not said anything. Yes, he had known a man named Steiner, had lived with him upstate in Woodbourne, along with some others. He had met them through mutual friends who seemed to be out of town. The Professor liked him—that was why he sent for him.

You know what he was waiting for? For the complete change in the Professor to become apparent. Given up hope? The farthest thing from it. He was more sure than ever that he was right! Only there was a bitter irony in his being right then, in the way it had happened. It must have been hard for him.

Because he could have gotten the Professor out of that jail in a hurry, by just saying so, by just helping him the least bit, if the Professor needed help.

There was no jail on earth that could hold the Professor. When they had caught him at first, he had been so weakened that he couldn't resist. The first few days they fed him so little, according to his needs, that he became ill. He had been eating twice what a normal man could eat, yet the doctor who examined him was forced to diagnose his condition as due to malnutrition bordering on starvation. His jailers, special agents from the F.B.I., fed him all he could eat after that. Some days there would be groups of doctors and F.B.I. officials watching the Professor eat. They still didn't know what they had caught. They had his tools,

some of them, and part of the story, and they were trying to understand something that was still a little beyond them.

BUT they listened to Varsag's suggestions and fed him properly, and kept his cell dim, and provided him with hits of wood and cheap, ten-cent store saws and hammers and things, and from these the Professor built magnificent trestles and castles and elaborate puzzles. His brain and his hands needed something to tap the huge energy and power that had returned to him with the resumption of his proper diet. The F.B.I. never dreamt that they had rehabilitated the monster in their midst.

So what kept him there? What kept this being locked in a cell that was a handful of matchsticks to him if he had wanted to escape? *If he had wanted to escape.* He didn't. That was it, you see. Varsag later explained it to me.

"I saw him those first days when his strength was returning to him, when the cunning, as I thought, was reviving in his brain. But the imprisonment had done something to him he didn't fathom. He had known that he had been doing things that were in conflict with the law. He had laughed at the police and Federal authority. But always, in the back of his mind, was the rationalization that he was helping society, that he was a benevolent member of it.

"But here, in his first helpless days, he had come into direct contact with the forces of the law, and in his every treatment, in every remark addressed to him, in every glance, he saw himself treated as an enemy of society. It awoke dim remembrances of another being in him, a being who had always been opposed to society, and against

whose existence every fibre in him rebelled. He could not reconcile the two at first. If he tried to rationalize, telling himself he was misunderstood, he could not make the rationalization strong enough to overcome the deep repugnance that his imprisonment brought.

"I didn't make it easier for him. At first I let him sense from my manner that I considered him among the enemies of society. Then I let him realize how he had jeopardized not only me, but all his plans. When he felt his strength coming back and suggested—the barest fragment of a suggestion—escaping, I left him and didn't come back for two days. He did a lot of thinking in those two days, and by the time I saw him again, I knew the long awaited crisis was past.

"It was after that that I asked for him to be given materials to keep him busy. By the time he had saw and hammers and nails, dangerous weapons in his hands if they had guessed it, he had left the thought of escape behind. From then on I spoke to him a little each day, always truthfully, telling him that I had never agreed with him, that I had gone along with him waiting for his recovery. He could understand me then, and the truth was a powerful medicine, but it was what he needed.

"Only after I was completely sure of him did I begin to undertake the final step—a step which I knew was so finely shaded in the adjustment he would have to make, that I might undo everything. I began to prepare him for his ultimate escape.

"It was absolutely necessary. I didn't know when I would ask it of him, and I prayed that you would not be caught until the chance had come, but I knew it had to be. For in his present state, the Professor was a complete vindication of himself and every-

thing he had done. Only by some action could he prove himself and my theories. What it was, I didn't know, beyond certain ideas I had. But I tried to make him see it, and little by little I succeeded. His faith and trust in me sometimes brought tears to my eyes. But he was happy those days. The animal fog that had enveloped his brain was gone. In all respects he was the old Professor again—not the thief, but the essential man, the new man, if you will, but a *man* not an animal.

"That had always been at the basis of my brother's and my own theories—that the man would remain a man, with these new resources added to his own, to be called upon when needed. And now, with final success in sight, with no permanent damage done, I waited for our chance with growing impatience.

"When the chance came it was as if the hand of Providence had reached down and tapped me on the shoulder. For in the midst of death and destruction, the way was clear for us to perform a miracle. The hand of Providence, I say, because such a cause had been one of the very thoughts I had had in consenting to create such a thing as a mole-man . . ."

ON AUGUST 8th, the so-called Black Hell mine, largest of the several Rockford mines in Pennsylvania, blew up. The number 14 tunnel was blasting that morning. One of the charges shook loose a section of the tunnel walls, which hit a dynamite wagon and smashed the rest of the tunnel to bits. The second explosion thundered along the main C shaft, wreaking havoc. Supports all along the 8th, 9th, 11th, 13th and 14th tunnels crumbled, and thousands of tons of coal and timber crashed down on every available exit. Reinforced drainage canals on the

10th and 12th tunnel levels shattered, and the vast underground torrents roared down on the blocked exits and began eating through. More than eleven hundred miners were entombed hundreds of feet underground, faced with slow suffocation if the water did not break through and drown them all first.

By mid-afternoon, just about the time when Varsag was showing the newspaper headlines to the Professor, the Rockford engineers had completed their second surveyal and declared the situation almost hopeless. For the men in the 8th and 9th tunnels there was a slim chance, for the others none. Their opinion, of course confidential at the time, was of vast importance later on.

Varsag's first inclination was to go to the authorities and beg for the Professor's release; even then he wanted to avoid having the Professor break out. But he faced the situation realistically. Even if such consent could be won, it might not be before priceless time had been wasted. And he had little faith that he could win consent. Hardly anyone understood the Professor's capabilities, and they might never allow the Professor to touch his strange tools. He went directly to the prison himself.

After weeks of visiting the Professor, he was no longer so carefully searched. From the tools which the Professor had left behind—Varsag had hidden them, together with the stolen money, in one of the Professor's concealed tunnels in the cellar—he brought several to the cell, hidden about his person. A torch lay strapped against one leg by double garters, drills and bits in his other trouser leg. His vest pockets were filled with small pieces of machinery, and all these were added to the already formidable collection of seemingly harmless tools which the Professor had. Dr. Varsag was taking no chances.

The Professor understood the minute he saw the newspaper. In the shaded, gloomy cell, it was the work of a moment to secrete his new tools among the models he had built, and after the Doctor left, he waited only for his early evening meal before he assembled his tools.

Shortly before seven that night, he darted into the Varsag cellar, picked up the rest of his tools, the large powerful ones he would need, and was gone. At that very moment the house upstairs was filled with F.B.I. men who were questioning Varsag and beginning to search the house. At midnight, judging his time carefully, Dr. Varsag told them he wanted to go to Rockford, Pennsylvania. It was his opinion that the Professor might be found there. Only the sound judgment of Inspector Ivern, who quietly consented to the strange request, enabled the Doctor to be on the scene by dawn. Even then, most of it was already over. He came in time to witness the end.

What the Professor did that night and the next day has already been told by many of the survivors of that disaster.

He first appeared in the number 11 tunnel. Starting in an open field half a mile from the Black Hell mine, he had hurrowed down on a forty-five degree angle until he could sense the water. He dug all around it, sometimes in circles, sometimes in long, convoluted double S shapes, burrowing through soft earth, drilling through rock and slate and coal, burning through timber, and when he first heard voices he had gone past the upper levels and reached the eleventh.

There was already two feet of water along the bottom of the tunnel. On all sides men stood, leaning against the walls, the sound holding up the injured, some sitting high against the overhead

on planks and braces. Again and again their quiet voices would join in a hymn, and against it would be the rhythmic, sharp tapping of a crowbar against the wall. They were taking turns in sending up the signal that they were alive down there, praying that they would be heard.

And then they heard something drilling, something that made the walls tremble a little, and every sound stopped, every breath was held. They heard it come and leave again, and then it returned, growing stronger, and suddenly bits began falling from one of the walls.

HOARSE shouts rang out as panic swept through the men. They had looked for rescue along the main shaft. Now they thought their own tunnel was beginning to cave in under the pressure of the water from the drainage canals on the 10th level. The noise—in their fear and exhaustion it might have been swirling water—stopped, and the wall held. But the moment they were calm and quiet again, the noises resumed, only to stop a second time as new shouts rang out.

Then it began again, and the wall began chipping away, and long slivers of coal fell into the water and black dust filled the air. But there was a design to it! The pieces were falling in a pattern! The fear-strained, exhausted men stood silently, their sweat-stained, grimy faces lit by the one feeble lamp they allowed, watching the hole open.

The instant it opened, a head popped into the tunnel. It was the face of a man, blackened and bruised, and it came through what all of them knew were great, unbroken depths of solid rock and coal, and all the time that this little man took to enlarge the hole sufficiently for entry into the tunnel, they were as silent as the dead. They saw

the dull-gleaming things he held in his hands and they saw that the little man's eyes were closed, and they watched him drop into the tunnel. He wore a suit that had once been white linen, and he had no shoes, and on his shoulders hung heavy, furry hags.

He stood among them and opened his eyes. "Follow the tunnel," he said. "It leads to the surface a half mile from here. I made it large enough for any of you. Go one at a time, but let someone stay here long enough to tell me how these tunnels lay."

Then he reached out and took the hand of a young hoy who was being held by a grizzled old man, and he lifted him as if he was weightless and pushed him into the tunnel. "Go first," he said. "Don't be afraid. There isn't much time."

And since there had been no sound before, there was none now. It must have been strange to see the way those men received the gift of life from him, but it was understandable. With the directions he received, the Professor went down to the 13th level, and then up again through the 8th and 9th, connecting them all to his own slanted tunnel. And though underground all was still while hundreds of men, tired and wounded and afraid, crawled through the earth to emerge under the sky once more, it was different above ground when the first survivors came up, to run back to Rockford and the mineshaft and tell their incredible story.

When the first fierce shouts of rejoicing were over, and the story itself was told, thousands went to the field where the little tunnel lay like an innocent hole in the ground. By the light of torches and great fires, the survivors were fed and dressed and the injured were treated, for none would leave the spot. Again and again frenzied shouts

rang out from thousands of voices as a new group would come out of the dark tombs, and always there were anxious questions about the little man who was still down there, still burrowing. And the story they told was always the same. . . .

By the time Dr. Varsag arrived on the scene, more than a thousand men had been brought up. The story had gone out by radio all over the country, and from everywhere people came pouring into that mining town in Pennsylvania. They flew in from Chicago newspapers in chartered planes, they clogged the roads for miles in cars. By morning the State Troopers had called out the National Guard to keep order. There were more than forty thousand people there, waiting in the fields.

You remember the picture of the Professor coming out of the ground. The sun was just coming over a flaming horizon, its light reflected against the Troopers' boots that were at the top of the picture. He was halfway out, his hands stretched out to lift himself up, and a circle of fifty reaching hands going toward him. His eyes were closed, but that was because of the flash bulbs. There was utter weariness on his face, but it was hard to see except in the closest pictures because it was so blackened.

They held back the wild crowds and wrapped him in blankets, and Varsag was there beside him. But all the Professor wanted was food.

"I must go back," he whispered. "There are still others in the number 14 tunnel. There's water all around them, but I'll dig under and I'll bring them up. All I want now is food."

And while he ate he studied the charts of the mine they brought him, his eyes burning from the brilliant sunlight, his ears crashing with the sounds of so many people. When he had fin-

ished eating, he lay down on the ground for five minutes and closed his eyes. Then he picked up his bags of tools, and without speaking to anyone, he went into the ground again while Varsag stood there mute, the tears streaming down his face. He wasn't the only one in tears.

WELL, you know the rest. When the Professor had done all he could, he had saved the lives of all but forty of those who had survived the explosions. Including those, the death toll among the miners was seventy, and the Professor made it seventy-one. He gave his life to bring out twelve of the men from the number 14 tunnel, and he must have known he was taking that chance when he went down again.

Some time later, when the searching parties were able to penetrate into that part of the mine, they reconstructed the manner in which he had probably met his death. He had been dead almost a month by then, of course, so it was hard to know for certain. They found him lying near his tunnel into the flooded level, with a beam across his back. It was an ordinary beam from the roof, and it weighed no more than thirty pounds or so, but it had smashed down on him and broken his back. They said there was a good chance that it hadn't killed him, but that he had lain there paralyzed and helpless until the water came through and he drowned with the others. They were separated from him by a wall less than a foot's breadth, and in a minute more, had he been able to, he would have broken through to them.

Even a mole, you see, couldn't make predictions about a tunnel it hadn't built for itself. . . .

I guess that's about all, except for the trial maybe, and a few details, if you're interested.

They had their trial, after all. Too much public clamor for it, so they had to go through with it, feeling like fools, I suppose, though they'd done nothing but their jobs. Because the public made that trial the occasion for one of the biggest public celebrations they ever had in Frankfort, Kentucky. Yes, they held it near the site of his exploit in the Fort Knox vaults, about which everybody knew by then. Pennsylvania fought to have it there, but Kentucky had the law on its side. I understand Pennsylvania flew all state flags at half mast for a month from that day on. I wasn't there, if you remember.

I understand the feeling was so high that it almost got Steiner and his bunch a pardon. But I don't think he could complain much. They nailed him on a dozen technical counts, but he'll be out in a few years. Varsag says when the time comes he'll do what he can with the parole board, but I think this is one time he'll listen to me.

Why, his time alone these days is too valuable to waste on someone like Steiner, except maybe in rat experiments. That laboratory they built Dr. Varsag—you know, the Emil Varsag Memorial Research Institute, to which

all those banks and others contributed—keeps him so busy his head is spinning. What's he doing there? You don't really expect me to tell you, do you? I didn't think so. Let's just say you'll hear from him one of these days. Between his volunteer Lightfinger Brigade—nice name, don't you think?—and the tools and things he's got to work out . . . well, he's busy, let's say.

And so am I. Swifto and I are going up to Canada in a couple of days, to be witnesses for the defense. They never heard about the Professor up there. What defense? Prager's! His wife's father is suing him for having to support his daughter all the time Prager was kept in Kentucky, testifying at the trial. Comes to almost forty dollars, and that's a lot of herring, though Prager says he just doesn't like the principle of the thing.

With us on his side he can't win. But we'll pay the forty dollars for him if he'll let us experiment on him before he becomes a father. No, it's not him we're thinking about—it's the children, and that's a job for a genius like Varsag.

Any more questions?

SUGAR RATIONING'S BRIGHT SIDE

IF YOU'VE been grumbling about the present sugar rationing and are wishing it would soon end, read what some eminent dentists and diet authorities have to say and perhaps you'll change your tune.

M. L. Wilson, assistant director of nutrition in the health and welfare defense program says that no one will suffer through sugar rationing. In fact, people will substitute their lost sugar calories with calories from other sources which will have certain minerals and vitamins not found in refined sugar.

Dr. L. H. Newburgh, an authority on diet at the University of Michigan, even goes so far as to say that it would be a godsend if sugar would be abolished for good. He claims that without sugar we would turn to eating an increased amount of

grains, meats, milk, and green vegetables which contain all the food value of sugar plus the vital B vitamins and minerals. Sugar is primarily a fuel food and milk is probably the best fuel substitute with one glass of milk supplying the full equal of four teaspoonfuls of sugar. In addition milk gives us proteins, vitamins, salts, and fats.

Dr. Russell Bunting and associates of the School of Dentistry at the University of Michigan find that sugar greatly increases tooth decay. This is especially true of children and they found by actual tests that children kept on diets containing little sugar had teeth free of decay.

So perhaps the government is doing us a favor by establishing our present sugar rationing plan and instead of clamoring for it to end, we should insist that it be continued even after the war.

AMAZING FACTS

By A. MORRIS

HOME GROWN RAT POISON

WHEN our imports from the Mediterranean region were cut off by the war, the rat was highly plagues. For red squill, probably the most potent of all rat poisons, comes exclusively from that region and so the rats thought they were going to go unmolested for the duration.

At first red squill was grown in this country, but it was not sufficiently poisonous to be effective. But then science stepped in to handle the situation in the person of Mr. Glen Crabtree, a biologist at the Wildlife Research Laboratory. He has developed a process whereby the poison is removed from American grown red squill bulbs by first pulverizing and then putting them into an alcohol solution. This concentrated poison is then mixed with dried squill to form a poison equal in effectiveness to the imported kind. This process is of especial importance to this country, for not only do rats carry disease but they also do almost \$200,000,000 worth of damage to American property each year.

* * *

REVOLUTIONARY IDEAS

DID you know that a submarine almost sank a British ship in New York Harbor during the Revolutionary War? Away back in 1777 an American named David Bushnell built his version of the present day pig boat and called it the "American Turtle." It was just large enough to admit one navigator who could stay under for a half hour without a fresh supply of air. The "American Turtle" submerged by taking in sea water, and rose by the obvious expedient of pumping out the water! It had an oar at one end for rowing forward or backward, and an oar at the other end for steering purposes.

That same year another deadly weapon of the present World War was invented. For in August, 1777, an American by the name of David Bushnell conceived the idea of floating kegs containing explosives which would ignite upon contact with ships. During the Revolutionary War he tied together a series of mines. When the crew of the British frigate "Cerberus" saw a rope off the bow of their ship they hauled it in, not realizing what was on the end of it. The mine exploded when the sailors dumped it on board. Three of the crew were killed, and a fourth was blown overboard.

* * *

FEATHERED SABOTEURS

AS IF the American motorist didn't have enough troubles with gas rationing and tire shortages,

now we learn how herring gulls are becoming public enemy No. 1 for many East coast motorists.

According to the Fish and Wildlife Service of the United States Department of the Interior these sea gulls are presenting a serious problem for motorists near Beaufort and Moonhead City, N. C. It seems that during the colder weather the gulls fly in large flocks over the roads and bridges in this region and drop clams, sea urchins, as well as several varieties of bivalves on the roads from a height of about forty feet. These animals are food for the gulls if they can first get the meat out of the shells and the gulls have developed their "dive bomber" technique to do just this. The shelled animals are split asunder by the impact with pavement and then the gulls swoop to get the meat before another gull beats them to it.

The gulls have never developed good table manners and so they never bother to remove the shells from the road. These sharp pieces of shell can cause a serious gash in an automobile tire and in some places the roads are completely covered with the shells. The Fish and Wildlife Service is unable to stop the gulls from continuing the practice and thus the highway commission must sweep the shells off the roads at regular intervals to safeguard auto tires.

* * *

MACHINES THAT PRODUCE RUBBER

THE Mechanical Goods Division of the B. F. Goodrich Company, Akron, Ohio, has developed a machine that will give America 34,000,000 pounds of rubber each year—the amount of rubber produced by 9,000,000 trees. This new supply is not due to any synthetic processes but is rubber that was formerly burned as waste material. Yes, each year we burned all this valuable rubber that is found in the rim section of old tires being reclaimed because there was no method available to remove the wires placed there when the tire was manufactured.

The machine, developed after Goodrich engineers decided to stop this waste, lifts the rubber down to the wire all around the tire rim. Then the machine holds the rubber while sharp mechanical fingers probe in to grip the wire and pull it in a certain direction that results in a shearing action. With the wire out the rubber is ready for reclaiming. Because of the present emergency, the Goodrich Company has unselfishly decided to permit all companies reclaiming rubber the use of the machine—a true American gesture.

THE DEGENERATE



R. F. F. F. F.

The death car was moving slowly now through very lovely countryside

MR. SMITH *by* WILLIAM De LISLE

**This was America under a dictatorship!
No democracy ever had such order and system
as this. That system "eliminated" Mr. Smith**

MR. SMITH, better known in State records as H.99/Flat-bush—that being also the address of the house in which he lived—entered the breakfast-room at 4 a.m., punctual to the second. With its white-painted walls, tiled floor and windows wide open to the fresh morning breeze, the room was in perfect state hygienically. It was furnished with a table and four chairs fashioned out of angle-iron enameled white, and the only attempt at mural decorative art was a photo-gravure of Mr. Huey P. Long.

On the wall between the windows was a time-recorder, and as Smith

pressed the button bearing his number a white light, then a red light appeared for a second. By those signs Smith knew that the time of his arrival was duly recorded at the Bureau of Industry. His comrade, on festive occasions called Mrs. Smith, and their two children—Henry, aged twenty-one, and Jane, aged seventeen—were already standing around the table. Without further ado Smith took his place at head of the table, and in a loud voice read the Act of Congress for the day.

As it happened to be Chromosome, the 73rd day of the month Electron in the year of the Totalitarian State 142, the appropriate Act had reference to the necessity for, and value of, deep-breathing exercises, in which the whole family afterward engaged. Refreshed by those gymnastics, they sat down to eat. No meat was on the glass-topped table, but there was a liberal supply of congealed carbobydrate and a large flagon of sterile distilled water. The dress of the household was uniform in type, no distinction being made between the sexes, but the married ones were to be distinguished from the unmarried by means of a yellow patch stamped with the State Arms—two broad arrows rampant—and that was worn by Mr. and Mrs. Smith on the left shoulder of their tunics. Glancing around the healthy table, Smith inquired with a smile: "All well?"—to which all replied: "All correct."



"I know somebody who isn't well," said Henry.

"Indeed?" asked his father.

"Yes, K.58/Greenpoint—old Ryan, you know—was taken away yesterday. His family hasn't had a report yet."

A deep silence fell.

"Come, come," Smith said hurriedly, "we must keep cheerful," and he hastened to open a State envelope. Having read the contents he turned to his son in righteous indignation. "Henry, I'm distressed to learn from this letter, sent by the Department of Eugenics, that you have been holding conversations with a young lady in the next street without sanction from the Department. And, worse than that, there's a report from the Secret Search Commission that a copy of Shakespeare's Sonnets was found hidden under your bed. You know very well, sir, that all poetry is on the State Index Expurgatorius and that possession of any love poetry is a felony."

"Poetry!" exclaimed Mrs. Smith, shuddering.

"The whole thing is a very serious reflection on me," added Smith.

"Well, that's got nothing to do with me as a Unit," replied Henry.

"It has indeed, sir, as you'll soon find out. My defense is clear. Only last Rest Day I read aloud the Laws and Appendices of the Department of Eugenics, whereby such actions are proscribed."

"I'm very sorry, Smith," said his son, "but I wanted to know how they managed in ancient days when a Unit chose his own comrade—sweethearts I think they called them."

"Great State!" moaned Mrs. Smith.

"Well, well, Mrs. Smith," said Smith wearily, "boys will be boys."

"Stop!" shouted Mrs. Smith. "Don't you Mrs. Smith me. 'I'm H.99/a and boys aren't boys, nor are girls. They're

undeveloped Units with insane delusions—the vestigial taints of Christian times. My poor dear mother at least taught me the Acts of Congress," and she sobbed bitterly.

"But," protested Smith, "both our children were in the State Asylum and released cured. Surely this conversation is treason."

"Both these children were let out of the Asylum too soon, and if they listen to H.99 they'll end up in the Letbal Institute before their time."

"The State forbid!" murmured Smith.

AT THAT moment the door opened and a keen hatchet-faced man entered. "Act 43, Section XI. Right of entry at all hours to the Inspector of Cheerfulness. All cheerful, I hope?"

"Yes, sir," said Smith, rising with the others. "All cheerful. Very cheerful indeed, sir."

As he produced his red notebook the Inspector rapidly scrutinized each member of the family in turn. "No, not all cheerful. You, for one, aren't cheerful, H.99/Flatbush. . . . But that's now out of my department. And what's the name of this Unit? He's got a peculiar look on his face."

"That's Henry, sir."

"How long's he been looking like that?"

"Looking like what, sir?"

"Looking like that."

"I don't know, sir."

"You don't know!" gasped the Inspector, and ran over to the telephone. "Hello! I want Mental Emergency . . . Is that you, Mental? This is Inspector Weevil. I'm speaking from H.99/Flatbush. . . . There's a case of Suppressed Complex here . . . No, it hasn't been reported . . . Very well, send over a psycho-analyst right away. Right you are."

"Now then," said the Inspector more cheerfully, "what's the name and number of this girl?"

"Jane, sir," answered Smith. "Born seventeen years ago, vaccinated five times, inoculated twice, hypnotized once, State Asylum. All her papers are in order. H.99/a/½ is her number."

"She will be in this house at 23 o'clock when the Special Woman Inspector for Young Female Units will call."

"Very good, sir," said Smith.

"I won't," exclaimed Jane, looking at her brother.

"Ooh!" sobbed Mrs. Smith. "That's awful! . . . 'Won't!'"

"Shut up!" said the Inspector. "That child's a Christian."

"No, no, sir, she's not," groaned Smith.

"She is. And instead of contradicting, let's see your dictaphone records. They'll show how you've been getting along in this happy home."

Smith dragged out a large cabinet from under the table, and this the Inspector unlocked with his key. "What's this I hear?" he exclaimed. "There's been quarrelling in this house—that's what it is. High voices—nasty language, eh? How about it?"

"We all deplore it, sir, we all deplore it," Smith said earnestly.

"I daresay you do," replied the Inspector, "and I'll tell you what, H.99. It's a good thing you aren't living in the days when what they called money was used, because what with fines and one thing and another you wouldn't have anything left. That's if we inspectors were to do our duty. . . . Well, now I must be getting along."

Among his far-off ancestors were some who had served their communities as policemen, and as he left the house a small package of carbohydrate was pressed into his hand by Smith.

But so preoccupied he was, he made no outward acknowledgment of the gift.

THE hours passed and various officials called. An agent for the Rest Day Activities Committee and an Investigator of Hygienic Bathrooms (with powers under the Act) were early arrivals. The Special Woman Inspector insisted on cropping Jane's hair, and Henry had a long and painful interview with the Psycho-Analyst. One investigator found moths in a woollen blanket, while another detected a couple of weeds in the little six-foot garden. But as those were minor offenses it wasn't altogether a bad morning for H.99/Flathush. Moreover, it was nearing noon, when Smith would be free to go to his four hours' work a day, during which time he bred guinea-pigs for the vivisection experiments at the State Pandemonium.

As Smith was about to leave the house a closed car stopped at the gate and a large fat man stepped out. This personage came up the steps, and taking Smith by the arm led him in a friendly way into the breakfast room. The fat man then closed the door and smiled.

"All correct," said Smith, feeling somewhat uneasy. "Perhaps you are the Inspector of—of Inspectors?"

"No, no, not as bad as that. I'm a Commissioner. We don't leave everything to the inspectors, you know. Now, Smith, my friend, you're not happy."

"Oh, yes, I am, sir—very happy indeed."

"Well, well, we can have a chat about that on the way. I'm going to take you for a little ride."

The Commissioner opened the door and led Smith out by the arm. As they went down the steps Smith's heart was thumping against his ribs. Such a physical emotion was entirely unreasonable,

because the big man had been very civil and was neither pulling nor pushing him—just pawing him gently; and yet in his cerebral cortex, owing no doubt to some vestigial taint from primordial times, the molecules were in a state of senseless panic.

Once seated in the well-cushioned car gliding through Brooklyn, Smith swallowed the big lump in his throat and turned to the Commissioner sitting beside him. "I just wish to say, sir, that I'm very sorry indeed if I've been unhappy."

"No need to apologize, my dear fellow. In any case, it wasn't your fault."

"Thank you very much, sir."

"Not at all. As you know, or ought to know, a Unit is never responsible for anything, so there's no need for you to blame yourself over this or anything else. If there's any question of laxity the State alone is responsible. Possibly our inspection hasn't been as efficient as it might have been. At any rate, things are now being improved, as the State itself is threatened."

"I'm sorry to hear that, sir," remarked Smith more cheerfully. "I mean, I'm glad we'll be better inspected, but I'm sorry the State's in danger."

"THAT'S just it," said the Commissioner, "the State is in great danger. This is not known to the Units, and the information I give you is secret."

"Thank you, sir, you may rely on my—"

"Of course I can. If there had been the slightest risk of your spreading the news I'd never have told you. The danger is from Canada. That country remained Christian and democratic, and is still inhabited by madmen obsessed with a delusion, in itself a fable borrowed from pagan mythology. For a hundred years we have forbidden any

communication with those people, but from secret sources we know what they're about. At present there's a unit in that country who calls himself King Churchill XIV. He and his people have now decided that it's their duty to destroy this great State of which you and I are bumble units."

"But surely it's none of their business, sir," said Smith, a trifle eagerly.

"Of course it isn't, but they threaten a crusade. And that's where you come in, Smith—or rather, where you go out."

"I beg your pardon, sir, but I'm afraid I don't quite get your meaning, sir."

"Well, my dear fellow, if those madmen make war, don't you see that it would be dangerous if we had within the State emotional units who might sympathize with the enemy?"

"I'd never sympathize with the enemy, sir."

"Ah, one never knows, although it passes all comprehension why anyone should want to sympathize with those madmen. If the democrats conquer, there will be a terrible upheaval and relapse. We'll no longer be housed, clothed and fed by the State. Our hours of work won't be limited to four a day—make no mistake about that. You wouldn't be told what you must do, but only what you must not do. A most pernicious philosophy. And, worse still, they'd restore tears and laughter to the world. You know, Smith, I often think that whenever a unit feels inclined to belittle the work of our excellent inspectorate he should quietly remember how fortunate we really are and how very different things might be. We might have been slaves to the inequalities of a democracy."

"The State forbid!" said Smith, piously raising his hat. "I swear it."

"No need to swear," corrected the

Commissioner gently. "In any case there's nothing to swear by, and no fear of treason on your part. But apart from these polemics, you're not really happy, Smith."

"Indeed I am, sir, very happy! I'm well inspected, and then I have my guinea-pigs. They're very fond of me, sir."

"Nonsense, my friend. In the first place, they're not your guinea-pigs, because they belong to the State, and secondly, although they enjoy their food, I'm quite sure they're not so lacking in intelligence as to harbor any emotion toward the unit whose duty it was to look after them. No, no, Smith, your face betrays you. You're not happy. Too much emotion. And your children prove it. The State permitted you to have two children. Well—have you bred Samurai? I think not. The fact is you're degenerate, and we can't encourage that to go on. Your own common sense must tell you that we can't afford to keep you. The Happier Homes idea has been given up. Too expensive and sentimental—almost Christian, in fact. Efficiency, H.99/Flathush, efficiency, and all for the State. That's the motto of every loyal unit."

"Where are we going, sir?" asked Smith, suddenly white as a ghost.

"To the Lethal Institute, my friend."

"No, no, you can't!" muttered Smith.

"What Act of Congress lets you do that? I have a right to know. I'm a free unit."

"The State has gone into your case. The Inspectorate and the Secret Service have worked conscientiously on it. We have all the reports. Everything is in perfect order."

SMITH glanced wildly out the window. "Riding like a murderer to the gallows," he said hoarsely.

"Now there you're quite wrong," replied the Commissioner gently. "There is no parallel. In the old days to which you refer the criminal was chained. There are no criminals now. You're not a criminal and you're not in chains. You are a free Unit who is about to submit to the requirements of the State."

"That's a lie," sobbed Smith. "The criminal was chained because he had a chance of escape, even if a slim one. I have no chance at all. That's why you don't chain me. Not even the Democrats would treat a man this way."

"Come, come, H.99, no temper, if you please. Be reasonable. Your own common sense must tell you that you're a greater danger than many criminals. But why all this fuss? There's nothing to hurt you. We have it on the highest medical opinion that it's quite painless. And what does it all amount to, after all? A mere rearrangement of the molecules . . . Ah, those molecules, Smith! If we could only get right down to them how much more quickly we would move . . . That's really all there is to it. And if you're afraid of anything else, that in itself is further proof you aren't fit to live. Now, as an old hand at the business, my advice to you, Smith, is—don't worry. Nobody's going to hurt you. In a few minutes we'll be at the Institute. After that you'll go on to the Crematorium, and within an hour at the most your molecules will be floating in the blue Empyrean—back into the Nitrogen whence they came. A beautiful thought, my friend—*What!*—the man has fainted . . . I must speak to his Inspector. This Unit should have been taken away twenty years ago. Perhaps the whole family would be better away. I really must press the Committee for a decision." Suddenly Smith groaned. "Ah, that's fine," said the Commissioner. "Coming to, I see. You'll soon be all right."

"I don't want to be all right," moaned Smith.

"Nonsense, man. Nothing will happen to you without your consent. Wait till you've seen the Sympathizers."

The car stopped at the door of the Institute and both men got out. As they went up the steps their bodies broke an invisible ray and two big doors slid open, revealing a gilded lobby lit by fairy lights, and in the center a splashing fountain in which the falling water was colored like a rainbow. Inside the entrance stood a flunky dressed in cloth of gold and silver. He bowed low to Smith and said, "Welcome."

"In you go," said the Commissioner. "I'll see you later."

As in a dream Smith entered, the big doors closing behind him without a sound. The flunky was smiling, and Smith, who had never seen anyone before except in the regulation dress, asked nervously, "Are you the Sympathizer, sir?"

"Oh, no, sir," said the flunky. "I'm only the doorman. The Sympathizers are all in the Salon, and you may choose anyone you like, male or female. This way, sir." And he escorted Smith to the curtained entrance of the Salon, which was on the right of the lobby as you entered. Drawing aside the curtain, he announced at the top of his voice: "Male and Female Sympathizers, pray silence for the entry of your guest, H.99/Flatbusb."

AS SMITH stepped in all the Sympathizers gave him a friendly smile, and he gasped for breath. He would have fainted again had not a middle-aged man, with large blue eyes beaming through gold-rimmed glasses, sprung forward and led him to an armchair. "Sit down, my friend. I know it must seem rather strange to you. Now have a good look around, take your

time, and pick whoever you like." His new friend was dressed in a well-cut lounge suit. He was a trifle stout and had the kindest, jolliest face Smith had ever seen. "Sympathizer Kind is my name, if you should decide eventually to trust yourself to me—but take your time. Every man to his taste." And with another smile he went back to the center of the room.

Smith leaned back in the well-upholstered chair and stared at the Sympathizers in amazement. Never before had he sat in such a comfortable chair, and never before had he seen men and women dressed and undressed in such a variety of fashions. What those fashions represented Smith of course could not know, yet each had its own appeal. Among the men, had he only known, he could have recognized a football player, a cowboy, a Navy officer, a golfer in plus fours, a policeman, a priest, a bill-billy and a gigolo. One man was naked, as was also one woman, a very beautiful woman with golden hair hanging down to her waist.

At the sight of her Smith blushed, for he was wholly degenerate and didn't understand sex appeal in its scientific aspects. Other women he might have recognized by their apparel were the ballet dancer, the aviatrix, the waitress, the belle of the ball, the nurse, the tennis girl complete with racket, the fan dancer, and the nun.

Each in turn smiled at Smith, but being of a retiring nature, he just sat and stared, until by a lull in their conversation he realized they were beginning to be bored with his presence. So he beckoned to Sympathizer Kind, who promptly joined him with the remark, "You've chosen well, my friend." The others clapped their hands in a well-bred manner and said, "See you later, Mr. Smith."

Sympathizer Kind led him across the

gaily-lighted lobby. "Can't very well have a heart-to-heart talk in there, old man," and whenever he spoke he smiled. Across the lobby they passed into another room through a door that closed behind them without a sound. In the center of this room was a circular steel table with two hygienic chairs of glass and chromium on either side of it. The walls were white, devoid of pictures, and against one wall were two steel cabinets. It was a square room, and in the center of the ceiling was the gauze of a loud speaker.

"Makes you feel quite at home," his new friend said with a smile as he beckoned him to the chair furthest from the door.

"Yes, sir," said Smith, gulping.

"Now," said the Sympathizer, "just you tell me all about it and we'll see what can be done."

AT THAT Smith poured out his troubles. The Sympathizer listened attentively, only occasionally asking a question to clear up some point about which he wasn't quite sure. When Smith's story came to an end, the Sympathizer looked grave and Smith's heart sank.

"This is very serious," the Sympathizer said thoughtfully, and then added, "I think the commissioner has made a very bad error in judgment."

"Oh, thank you, thank you, sir. Then you will help me escape?"

"Of course I'll help you, but we must consider ways and means. Now let me think for a minute." He leaned back in his chair and stared at the ceiling for a few moments. "Do you realize, Smith," he said at last, "that in order to save you I must tell you everything about this place?"

"Yes, sir," Smith said eagerly.

"Well, then, do you know that no male or female Unit who comes into the

Institute ever leaves by the same door?"

"Yes, sir."

"Good. They all leave by the back door—dead. Except one or two, of whom you'll be one, who reach the back door at the end of the Lethal Tunnel—alive. Naturally you want to know how that one or two escape."

"Yes, sir."

"Well, I'll tell you." And the Sympathizer pulled open one of the table drawers and produced from it a gas mask, which he patted gently. "This is my own special mask. Now, when I don't want a Unit to escape I put it on and tell the Unit that I'm going to give him, or her—because, curiously enough, some female Units select me, ha! ha!—a duplicate mask. Then I open the steel cabinet nearest to you and take out a mask exactly like mine. Of course it's a dud, and when we reach the gas zone it doesn't work. Get it?"

"Yes, sir," Smith said dubiously, because the problem was complicated.

"Don't pretend, Smith. You still have doubts. Ha! ha! Well, you can set your mind at rest because I'm going to give you my own special mask—my very own." And with that he placed his mask by Smith's elbow on the table.

"Thank you, sir, but—aren't you coming down the—the—Tunnel with me?"

"Of course I am, but I'm going to have a mask like you. Only I don't take my mask from the first cabinet—no fear—but from the second, where the masks are as genuine as the one I gave you." He opened the cabinet nearest the door, removed a mask and placed it on the table near his chair. "Now I must tell you about the Tunnel and what to expect at the other—"

A gong sounded, and from the loud-speaker in the ceiling came the words, "Sympathizer Kind, if he can spare a

moment, is urgently wanted in Antechamber Five."

The Sympathizer frowned the first frown Smith had seen on his face. "Excuse me a moment, Friend Smith, I won't be long, I wonder what it is?" He gave a low whistle, the door opened and closed behind him without a sound.

LEFT alone in the sound-proof room Smith smiled. What a really decent fellow the Sympathizer was. To give his own mask to a total stranger and choose a new one for himself. No, he had better change the masks. At the Pandemonium Smith had learned all about the dangers of respiratory infections. Perhaps Sympathizer Kind liked his mask so much he never bothered to have it sterilized. Germs innocuous to Kind may not be so innocuous to Smith. That much of bacteriology he had learned at the Pandemonium. He changed the masks, but it would never do to tell Sympathizer Kind of his views about sterilizing gas masks.

Suddenly the door opened, Sympathizer Kind, looking a little flushed, entered, glanced anxiously at the table, smiled and said, "Well, here we are again. You may be wondering why I was called away. In the Salon did you notice Sympathizer Eve—the female in the altogether, I mean without anything on?"

"Yes, sir," Smith said eagerly.

"Well, I was just called to Antechamber Five to explain to a Unit that his attempted love-making was a little premature, although at the end of the Tunnel he may do what he likes with Sympathizer Eve. But—let me see—I was telling you about the Tunnel. Yet—why waste time? On with our masks! The sooner we're in, the sooner we're out. Ask any questions you like on the way, Friend Smith."

"Yes, sir," said Smith, as they both

put on their masks. "But where's the Tunnel?"

"There!" answered the Sympathizer, and as he pressed a button the whole of the back steel wall of the room rose, revealing a square tunnel with beautiful scenery painted on the walls and a sky-scape on the ceiling, all brilliantly lit by artificial daylight. On the floor of the tunnel was a long-slung trolley, running, as the Sympathizer explained, not on wheels but on long interrupted plates of magnetic steel. Two large hygienic chairs were screwed to the trolley.

"Take your pew, Smith—they're both the same." And so Smith sat in one and Sympathizer Kind in the other.

"Just put your arms along the arms of the chair and your legs against the front legs, and I'll do the same."

Smith followed the Sympathizer's instructions.

"Now," said the Sympathizer, "I'm going to press a button with my left foot." Smith watched, and in a moment he was pinioned to the chair by semi-circular steel clamps around his arms and legs. He shrieked.

"Don't be a fool," shouted the Sympathizer. "Can't you see I'm clamped down just like you?"

Smith looked, and saw his Sympathizer was clamped down too.

"I'm very sorry, sir."

"That's all right. Now start her off. Under your right foot you'll feel a knob—unless you have extra-thick soles on your shoes that no ordinary Unit is supposed to have . . ."

"No, sir, I haven't, and I can feel the knob."

"Then press it."

"What happens then, sir?"

"The steel wall is lowered behind us, and off we go."

"No, sir, I don't like to do it."

"Then I'll have to do it myself, but I'm bound to say, Smith, you don't seem

to have much confidence in your Sympathizer."

SMITH felt the knob beneath his right foot sink. Immediately the steel wall came down behind them, and the trolley was moving down the Tunnel at a speed of three miles an hour.

"I'm sorry I mistrusted you, sir."

"That's all right, Smith. Maybe I was a little rattled by the scene in Antechamber Five. Just forget about it. Look at the scenery"

Smith looked on the painted panorama to right and left. "Oh, Kind, I've never seen anything so beautiful!"

"I guess you haven't. I've never seen the reality, nor am I likely to."

"What is it?"

"It's Lake Awe, where Our Totality lives."

"What's Our Totality, Sympathizer Kind?"

"No, of course, you could never have heard of Our Totality. Mind you, I've never seen Him, but I know what He is. How shall I put it to a Unit like you? You know your Commissioner? Well, hasn't he got more brains than you and I put together?"

"Of course he has, sir."

"Well, Our Totality has exactly one thousand times more brains than any Commissioner. That's why He and He alone lives there, on that island we're passing now. Now do you understand?"

"No, not quite, Sympathizer."

"Well, all I can say is that you really make me tired. Anyway, I'm a little rattled from what happened in Antechamber Five, so I'm going to take it out on you."

"Please don't, Sympathizer. Whatever happened had nothing to do with me, and you promised to tell me what happens when we get to the end of the Tunnel."

"What are you afraid of?"

"That you're cross, Sympathizer, and what the Commissioner will do when he sees me alive at the end of the Tunnel."

"The Commissioner'll never see you alive at the end of the Tunnel—don't shriek, you fool!—this is no time for shrieking. At the end of the Tunnel there's only four deaf-mutes ready to put you into your Container."

"The Container!" shouted Smith. "You promised to tell me about the Container."

"So I did, and I will, if you'll only keep calm. Should have told you before, but that disgraceful scene in Antechamber Five kind of put me off. Maybe you'll feel a little sympathy for me when I tell you that Sympathizer Eve is my comrade."

"Oh, yes, I do, sir—but about the Container . . .?"

"What about it? Nobody's going to put you in any Containers. Didn't I give you my own mask? Of course I did. Well—oh, damn Eve—when our trolley bits the buffers in the open air at the other end, the clamps are automatically released and you and I walk away. Where do we walk? You can ask more questions than a child, and I've had plenty of experience with them. Why, you silly, we just walk right out through a little steel gate in the fifty-foot wall on our left. It opens only from the inside. There's no knob on the outside. Now are you satisfied?"

"WHAT about the deaf-mutes, sir? Won't they be a little surprised?"

"They'll just think you're a new Sympathizer taking a trial trip with me."

"But what about the Commissioner?"

"Oh, damn the Commissioner! What about him?"

"Be careful, Sympathizer."

"That's all right. In the Tunnel nobody can overhear what you say. It's the only place where they can't. But what about the Commissioner?"

"Well, won't he be angry when he finds I'm—I'm—still alive?"

"Look here, Smith, you really make me tired. Plaguing the man who's saving your life. I'll tell the Commissioner you're a superman who held his breath for seven minutes in the gaseous zones and escaped. Now are you happy?"

"Yes, sir, but where do I go after we get out through the little steel gate in the high wall?"

"Hell, you're coming to live with me and Sympathizer Eve, because we both like you. Now are you happy?"

"Very happy, sir."

"I thought you would be. Then maybe you'll let me ask you a few questions now?"

"With pleasure, sir."

"What would you say should happen to a Unit who chose Sympathizer Eve and wanted to go down the Tunnel with her in that state? Do you think he should die?"

"Indeed I do, sir."

"Smith, I'm beginning to like you. You have a comrade of your own. You know how the very idea affects a man."

"Ye-es, sir—but of course they're both clamped down in their chairs and there's deaf-mutes at the other end."

"Lucky thing for you, Smith, that I'm clamped down, or I'd smack your face for that insult."

"I didn't mean—"

"Shut up! I'll tell you why Sympathizers are clamped down. Sometimes the victims say things that rile up their Sympathizers. Once, only the victims were clamped down."

"Oh, dear, oh dear!"

"Listen, you fool. Did you see that priest in the Salon? Don't deny that you know what he was supposed to be.

Yes, Smith, there are Units so degraded as to believe in God and who choose Father Peace as their Sympathizer. God help them! In the Tunnel they find he's a fake, and when they do these godly Units say things that make him squirm in his clamps. That's why every Sympathizer is clamped down now. His predecessor, Father Help, lost his life through lack of clamps. A Unit in the Tunnel insulted him. Father Help smacked the Unit in the face and cut his knuckles on the victim's gas mask. Then when the two were passing through the gray gas, the gas got in through the cuts and poor Father Help was killed as well as his victim. The deaf-mutes were horrified."

"Oh, don't tell me any more, sir—I can't hear it!"

"I will tell you more. I'm going to make you scream with terror because you insulted Eve."

"I didn't, sir, I swear I didn't!"

"You did, but I'm not really cruel, Smith. It's best to get 'em shrieking at this stage, because in a minute or so we're going uphill into the Larch Forest—the sweet gas zone through which we pass for two minutes. Then downhill for three minutes into the valley of gray gas. Some Units when they enter the sweet gas zone try to hold their breath. Nobody can hold his breath for more than two minutes. All the worse if they do because then they are conscious when they breathe the gray gas, which sears eyes, nostrils, mouth and lungs for about thirty seconds before it stops the clock. Not scared yet, Smith?"

"Just a little, sir."

"Why only a little?"

"Because we both got real masks."

"You fool! If ever a Unit deserved the blue Empyrean, as that damned Commissioner calls it—you're the man. Why should I risk my life to help a useless Unit like you to escape? The mask

I gave you a dud. Mine's the only real gas protector in this Tunnel."

SMITH screamed, then was suddenly silent, thinking. What had he said to the Commissioner—one chance in a million on the way to the gallows. It was now an even chance, and maybe—his heart beat wildly—a certainty. If not, he'd be glad to die and get away from people like Sympathizer Kind.

"Did you faint, Smith?"

"No, I didn't," was the unexpected calm answer.

"By gum, you didn't! I'm beginning to admire you, Smith. Well, now we're going uphill. Take deep breaths, Smith. That'll put you to sleep, and then you won't—Hell, you fiend, you changed the masks! Oh! I'll hold my breath. I . . ."

Smith sat shivering as the trolley rose through a mound of painted larches in the Tunnel. He was breathing quietly, and smelled nothing. Such was his degeneration that he felt pity for Sympathizer Kind. The trolley started going down hill into a gray mist. Then came the sound of forced expiration, followed by an inspiratory shriek, and the trolley shook with convulsive movements for a moment or two. Smith looked at his companion. Sympathizer Kind was limp, and the engorged veins on his bald head were black.

Slowly—or, to be precise, at the rate of three miles an hour—the trolley ascended out of the Valley of Gray Gas and continued on the level. At the end of a long vista Smith saw a small square of daylight, and gradually that square became larger and larger. As the trolley approached the exit Smith's heart was thumping again. Would the Commissioner be there?

The Commissioner wasn't there. Twenty feet beyond the end of the Tunnel the interrupted plates of magnetic

steel stopped at a huffer. Behind the buffer stood four little men, and by their side lay the Container. The trolley met the huffer, the clamps sprang apart, the body of Sympathizer Kind fell sideways on the floor, and Smith stepped out of his hygienic chair.

Without a glance at Smith the four deaf-mutes placed the body of the late Sympathizer Kind in the Container, clamped on the lid and carried it around a corner of the Institute. To his left Smith saw the high wall with the little steel gate. He tore off his gas mask, put it in his pocket, and the next moment he was walking like a free Unit in the street.

Some twenty minutes later Smith re-entered the breakfast-room at H.99/Flatbush, where Mrs. Smith was solemnly reading to Jane and Henry the Act of Congress concerning those who die for the State. As she caught sight of her comrade, Mrs. Smith screamed, "Oh, I thought you were dead! We got the official report on the radio almost an hour ago. The Commissioner himself spoke to all Flatbush: 'Unit Smith, H.99/Flatbush, has left the Lethal Institute, where his last words were: "I hail the blue Empyrean, and may less worthy Units follow my lead."' It sounded lovely. And now, in spite of everything, you're back."

"So that's what he said, eh? Well, Mrs. Smith, I can tell you it's a damn lie."

"Oh, you'll be the death of me—the death of us all!"

"Sorry to see me back, that's what it is."

"No, it isn't," sobbed Mrs. Smith, "but I did think you were dead."

SUCH scenes aren't good for children.

Henry sat with his elbow on the table, his cheek resting on his hand and a frown on his face. To do the lad

justice, he was thinking of his Shakespeare's Sonnets (confiscated under Secret Search Commission Index Expurgatorius, Article V, Section I, Clause A). Jane had no such thoughts. She rushed to her father, threw her arms around his neck and shouted, "Daddy, I'm glad you're back, and your guinea-pigs will be glad too."

The sound of a Chinese gong on the loudspeaker put an end to a scene that was likely to degenerate into sheer pathos. "Commissioner speaking to H.99/Flatbush. Most secret and confidential. Under pain of instant death, no member of Smith family to leave their home tonight. No communion with neighbors. Your house now surrounded by members of the Poisoned Darts Deaf-Mute Brigade. Anyone who attempts to leave dies instantly without benefit of Act of Congress. Entire family to parade in breakfast-room at 4 a.m. tomorrow, without carbohydrates or water. At that hour, I, the Commissioner for all Flatbush, acting by and/or through the authority of Our Totality, will decide whether the sentence on all now present will be death or exile. Now each and all to his or her bed. There shall be no talking in bed. Every pillow is overheard. Tomorrow, all depends on Smith speaking the truth. Now, to your beds without a word, or at your peril. Amen."

At 4 a.m. the next day the family of H.99/Flatbush stood at attention around their breakfast table, having eaten no breakfast. At one minute past four, because even Commissioners may be late, a big car slowed down and stopped outside their gate. Within a minute the Commissioner was in the breakfast room.

"Sit down, everybody," he ordered, and all the Smiths sat down.

"Now find a chair for me," said the Commissioner.

Smith sprang to his feet. "Please take mine, sir. There isn't another in the house."

"Sit down, Smith. No other chair? That's to your credit. You obey the Law of No Hospitality. Some don't. Sit down, I will stand. All your lives are in my hand, or rather in the hand of Smith, the head of this benighted family. He shall answer me one question. Stop! Is that radio on or off?"

"I don't know, sir. We're not allowed to interfere with it."

"Quite right, my friend. Stand up."

THE Commissioner seized the vacated chair and smashed the radio.

"Now, Smith, I can ask, and you can answer in the presence of your family, a simple question on which, because I'm always fair, your life and the lives of those about you depend. Answer within four seconds, please, the psychological limit. The question is—Did Sympathized Kind make a mistake, or did you change the gas masks?"

"I switched the masks, sir."

"Good! You said it within two seconds, and therefore it's true. Now, Smith, you and yours are to be exiled."

"No, sir, we'd rather not."

"You fool, you don't know what you're saying. When we find that a Unit, his comrade and offspring are unfit, we destroy them. Yet when, as in your case, unfitness is allied to cunning we deport or exile them to Canada, in the hope that they and their progeny may flourish in Canada, and so breed degeneracy among our enemies. Now, all of you get into the station-wagon that's to take us to the airport."

This done, the Commissioner said:

"Now, Smith, as we're on the way to the airport, you may tell me a few things I've been wanting to know. No physical force used at the Lethal? No.

"That's fine. Any, any—well, shall we say mental torture applied in the Tunnel, as far as your experience goes?"

"Yes, sir, he was a fiend, though I was sorry for him at the end."

"My, but you *are* degenerate, Smith. Look, the less you go feeling sorry for anybody the better—at least until you and yours are safe in Canada. And to feel sorry for anyone like Sympathizer Kind you must be doubly degenerate. He was guilty of grave dereliction of duty. What do you think all that beautiful scenery is for?"

"I don't know, sir."

"To interest the Units on their way along the Tunnel. For the first and last time in his life the condemned Unit sees beauty. He thinks he has a genuine gas mask and is interested all the way. In the Larch Forest he breathes the sweet gas, goes to sleep and never wakes up. What could be more humane?"

"Nothing, sir."

"Looks like the Lethal needs a little purging. I'm going to send some of my best Agents-Provocateurs down this afternoon."

"They may get killed, sir."

"Not they. They never get hurt. When they go down the Tunnel with the Sympathizers there'll be no gas on. I'll see to that. But I'll be waiting for the trolleys at the end of the Tunnel, and if any mental cruelty is reported—what do you think I'll do?"

"I don't know, sir."

"Why, I'll stop the release of the clamps. Take the real gas mask off the face of the Sympathizer in question, stick it on the face of the Agent-Provocateur, switch on the gray gas and send the trolley backward through the Tunnel. Well, here we are at the airport. It's a fine day."

AN AIRPLANE, ready to take off, was waiting in the center of the

field, and the car drove alongside it. The pilot saluted the Commissioner, who showed him a card which he read carefully and nodded. "Deaf-mute," explained the Commissioner to Smith. "No chance to be tempted away from home." Four groundsmen, also deaf-mutes, strapped parachutes on each of the Smiths and then placed four ladders against the side of the plane. "Up you go," said the Commissioner to Smith, "into harrel No. 1, your comrade into harrel 2, and the children into 3 and 4." All obeyed, and Smith found himself standing in a large barrel with smooth sides, over the top of which he could not see.

"Now," explained the Commissioner before the groundmen fitted on the lids, "there's no danger of suffocation. The lids are perforated with small holes, enough to let air in and out, but not large enough for fingers to get through for holding on. At a given destination the pilot will pull a lever, and one by one the bottoms will drop out of the barrels. After that each of you should say 'Twenty-one, twenty-two, twenty-three,' which takes three seconds, before pulling the rip-cord. That means you're clear of the machine before the parachute opens. By the way, Smith, these parachutes work all right, so there'll be no switching them."

The lids were fitted. Smith heard the ladders being removed, the engine splutter, then roar. In his closed harrel he felt the plane jolting, then the steadiness of the air. A great fear possessed him. What did the Commissioner mean by saying the parachutes worked all right? Worked all right. Did that mean they killed you? Were the parachutes genuine? On those doubts his mind worked steadily until suddenly he and the bottom fell out of the harrel. A gale of wind struck his body and blew him backward on his back in the air. He

forgot to count until he saw Mrs. Smith drop out of the plane in front and some distance above him. Then, without counting, he pulled the cord.

In the corner of his left eye something fluttered, and he closed his eyes. He was falling. Then came a wrench under his armpits and he was swung vertically in the air. He looked up, and

the big parachute was open. So also were three other parachutes. Soon he was steady in the air, for the day was calm. He looked down. The kindly earth was rising slowly to meet him. It was a country of lakes, green fields and hills—and oh, how green was the grass on those hills coming nearer and nearer!



(Continued from page 6)

vein, and almost forgot to put in either fantasy or science! Along toward the last, it appeared, but if it hadn't been such a swell story, we might have turned it back with a "whatya trying to pull, a wilcox?" Fans who remember Wilcox's "Secret of the Stone Doll" will get what we mean.

INCIDENTALLY, you can "meet" Lee Francis in "Meet the Authors" on page 203. If it weren't for the fact we got his autobiographical sketch in the mail, unsolicited, we would have found ourselves without a meet-the-author for this issue. Thanks, Lee.

FRANK R. PAUL, still doing navy work in Florida, has our back cover this month; another of his "Stories of the Stars" series. His last cover received more fan mail than any Paul drawing to date. We still have several more of this series to come, and we are hoping the old master will find time to add more before we run the last one.

YOU'LL notice seven artists grace the interior of our magazine this month, one for each story. These seven, plus Sewell's feature, and the two covers, makes nine different artists for one issue. Is that variety, or isn't it?

NEXT month we present the story you've been asking for for years! It's A. R. McKenzie's "Luvium, the Invincible City," a sequel to the famous Luvium stories of many years ago. However, this story is a brand new one, and if you missed the original Luvium stories, you won't be at sea. This story is perfect and complete in itself. The amazing departure in style from that of the Juggernaut Jones stories will startle you, too

THE present war, although it has not yet engulfed Spain, still prevents us from receiving the cork she produces which is an absolute necessity for cold-storage insulation. But, just as other problems have been solved, American inventive genius has been put to work and now the Celotex Corporation reports that they are using sugar cane grown in Louisiana to produce a cork substitute. The substitute is equal to corkboard in its ability to keep heat out, it is cheaper, stronger, and best of all the supply is far in excess of all the possible requirements of the United States and the other United nations.

The research for the substitute was carried on at the company's plant and research laboratories at Marrero, Louisiana, where it was discovered that the fibers comprising the residue of the cane stalks after the sugar juices had been squeezed out was the answer to their problem. The substitute possesses all of the cork's insulating properties.

The new product was given cork's ability to keep out heat by mixing the cane fibers in selected lengths and thickness and then weaving and felting them into half-inch insulating boards possessing a low density. To give it cork's moisture resistance, the fibers were sterilized, water-proofed, and then protected from dry rot and fungus growths by the patented Ferox process before they were even felted into the boards.

Due to the fact that the substitute is not only as good as cork but also cheaper, this country will never have to depend on Spain for cork to be used in cold-storage insulation even after the war.

WE NOW have a method of disabling Japanese beetles by merely touching them with a poisonous spray, and only with a similar method could be invented for use against the Japs themselves.

This procedure was described by Dr. W. H. Tisdale and Dr. A. L. Flenner of the du Pont pest control laboratory at Wilmington, Delaware. Spray contact with the beetles promptly paralyzes their mouthparts and forelegs. And, of course, a beetle with numb jaws can't be much of a pest.

Dr. Tisdale reported that there are a number of compounds having this effect on the insects. All of them are derived from a complex organic chemical known as dithiocarbamic acid. Some of them have been found effective against other

animal pests, among them the internal parasite causing the serious poultry disease, coccidiosis.

The compounds are also deadly to fungi that cause plant disease. They even do their own sticking, eliminating the need for adhesives added to many other fungicidal sprays to make them cling.

FOR many years research scientists looking for a cure for typhus fever have been handicapped by the lack of an animal in which the same typhus that attacks man could be reproduced. But at last their search is over according to Dr. J. C. Snyder and Dr. C. R. Anderson, of the Rockefeller Foundation, who say that the cotton rat is the laboratory animal they have been looking for.

When the typhus fever germs were injected into young cotton rats, they died within three to four days. But if a serum prepared from the blood of a person that had recovered from typhus was injected into the rats they were immune to the same doses of typhus fever germs that had killed the other cotton rats.

Although the cotton rat is far superior as a laboratory animal to any previously used in typhus experiments, certain of the tests show that an animal even more susceptible to the typhus fever germs is desirable before the disease can be stopped in man.

At the same time, Dr. Gerardo Varelo, a Mexican scientist, has been injecting mouse typhus germs into the cotton rats and he reports that although the germs lived in the rat's brain they did not make it sick. If another laboratory animal is not found, the cotton rat will have to do, for the control of typhus is a vital problem that affects every nation at war.

ONE of the most puzzling observations of modern times was made on a common yet strange amphibian type of animal, the salamanders. It was observed that certain animals which lived in water resembled amphibians, like the frog and toad, but never changed from the larval state to the adult. The axolotl, one form of which lives in Mexico, is the name given to this strange animal.

Its true identity was learned when some scientists were returning from Asia and had some larvae of a certain salamander which they were studying. One American friend remarked that the larvae closely resembled the axolotl, and later it was found that this was exactly the axolotl. The name of the adult form was *Ambystoma* and for a long time it was thought that this and the axolotl were separate and distinct species. When the eggs of *Ambystoma* were left in the same places the eggs of the axolotl were, they developed axolotls also. The axolotl on the other hand turned into the familiar *Ambystoma* when forced to breathe air. This constitutes one of the most remarkable events ever noticed in biological sciences.

CAN X-rays harm an unborn child? According to a verdict handed down by a jury in the

Middlesex County Circuit Court in the case of the answer is yes to the tune of \$50,000 damages.

The history of the case starts over eight years ago when _____ of New Brunswick, N. J., first examined _____.

The patient was afflicted with a small internal tumor and it was decided that X-ray treatments might reduce the size of the tumor. _____ who was 52 years old, thought that she was unable to bear any more children, but during the course of the treatments _____ discovered she was pregnant.

On May 2, 1935, an idiot boy was born to _____ She started suit for \$400,000 damages on the grounds that the X-ray treatments had caused the child to develop into an idiot.

_____ claimed that the strength of the X-rays was not sufficient to harm the child and he was supported in this claim by several specialists. However, lawyers for the plaintiff also brought in physicians who held that the X-rays might have injured the child while it was developing. The verdict was in favor of the plaintiff, but this does not prove conclusively one way or the other whether X-rays can harm a child during the period of pregnancy.

AMERICA was caught asleep at the switch once and every one of us is determined that we won't make the same mistake again. And so America is methodically manufacturing camouflage devices to protect our many vital war plants from being spotted by enemy bombers.

And, though you may find it hard to believe, glass is one of the essential materials being used. Yes, it seems strange that glass can be used to hide our war plants when we all know it is perfectly transparent, but the mystery is solved when we see how it all works. The glass is drawn into flexible fibers that are thinner than the human hairs. They are very light weight, don't decay, won't burn, and neither salt or fresh water will affect them and thus they are ideal for the coverings to be thrown over the metal-mesh camouflage nets that serve as a "blanket" over our war plants.

The Owens-Corning Fiberglass Corporation has developed the glass fibers that are spread over the nets and then painted with designs that harmonize with the adjacent countryside. When the appearance of the surrounding territory changes with the various seasons, it is a simple task to repaint the fibers so that the nets cannot be detected from the air. Moreover, since neither the glass nor the nets will burn, they cannot be harmed by incendiary bombs and thus give the war plants double protection.

WITH that observation, we close the observatory for this month. Now that the Nazis have been kicked out of Africa, see this month's *Fantastic Adventures* and see how they are going to be kicked out of Greece. Which will kick them from the fat into the fire! Rap.

STONE GODDESS of Yunnan

By **LEE FRANCIS**

THE room was large and furnished with castoff furniture, typical of rented conference rooms in middle class hotels. There were thirty-five men, lounging about in various stages of boredom. A blue haze of cigarette smoke drifted like fog through the sun rays that came in the window. The "old man" sat behind a plain, pine table.

He was about thirty, but he looked much older. His hair was stone gray and bushy eyebrows drooping down almost covering the healthy brown eyes and the crows-foot wrinkles that darted from their corners.

"Part of the story was outlined to you months ago," his voice was low and clear. "You've heard the rest of it this afternoon. You will meet at Dock 17

When this Flying Tiger flew in pursuit of an elusive Jap plane, it led him to the cave of a murder cult and to a stone goddess who was alive!





With a look of horror, he recognized the close figure.

tomorrow and be prepared to leave the States for a period of at least one year. Any questions?"

Bob, Reagan arose from the chair where he had been fidgeting for the better part of an hour.

Reagan was young, not over twenty-three. He was slim and well built and his voice reflected a certain recklessness that effected everything he did.

"Yes, sir. If you don't mind, why not tell us the ship we sail on? It's too late now for that to do any harm."

Commander Walker smiled. The smile wrinkled the crows-feet and made them deeper. His lips remained firm.

"It's never too late for a torpedo to stop us," he said. "Reagan, I know you fellows can't realize quite what you're up against. This job demands a hundred pilots because that's all the planes we can buy at the present time. Out of the hundred boys who go over, it's hard to tell who will come back."

He hesitated, his face growing sober.

"I feel it's only fair to say that not more than thirty percent will return here alive."

There was silence in the room. Walker let his eyes wander back to Reagan's.

"It's not too late for any of you to change your mind," he said.

Reagan grinned.

"If you're saying that for my sake, Commander, forget it. It's just that I'm supposed to get a cake from home in a few days. I hate like hell to miss it."

Laughter swept the room, and Walker stood up.

"That's all, fellows," he said. "Tomorrow night at seven. Dock 17. You'll be registered as salesmen, businessmen and every other classification on the books. Until we reach Rangoon, just remember none of you ever saw a plane."

He stepped off the slightly raised platform, and went out the side door.

The group of men broke up. Pairing off, they went out into the early San Francisco afternoon.

AT THE hotel door Bob Reagan waited. A stout, moon-faced boy came out and stood grinning at him.

"Well, Bob, looks like it's come."

Reagan grinned.

"Good thing you guessed it, Crash. That diet last week put you just two pounds under the flying limit."

Walton walked at his side toward the down-town district. Below them the broad, circular bay shimmered in the sun. A Catalina flying boat ripped up the surface and took to the air with a roar.

"What was the gag, Reagan?" Walton asked. "I didn't get that question you asked the old man. You ain't got no one who'll be sending cakes."

Reagan looked behind him quickly. The street was deserted.

"It's that Chinaman, Wong," he said slowly. "Walker refuses to tell us the ship we sail on, and yet I'll swear Wong already knows. He's sailing tomorrow night and I'll give you odds that he'll be on the same boat."

They reached the hotel where Reagan had taken a room, picked up the key and started toward the elevator. The desk clerk called after them.

"Just a moment, Mr. Reagan, a gentleman was here. Left a message for you."

Reagan turned back.

"Message? I don't know anyone in Frisco."

The clerk seemed surprised.

"This gentleman was Chinese," he insisted. "Knew your name and all about you. He left this letter."

Reagan took the letter and followed Walton to the elevator. Once inside

he opened it. To the elevator boy he said, "Seven," and then started to read hurriedly. A puzzled frown crossed his face.

"Well I'll be damned." He folded the letter and pushed it into his pocket.

Walton stared at him.

"Out with it," he begged. "Mystery notes and you won't let me read 'em?"

"Seven," the elevator boy announced.

Reagan's room was at the far end of the hall near the fire escape. As they walked down the hall, Reagan took the note out again and passed it to Walton. He read the message while Reagan produced his key and admitted them.

Your last visit to China was not pleasant. I predict a vastly more unhappy journey this time, unless you change your mind at once. Beware of the twisted rope.

Wong.

A whistle escaped Walton's lips. He followed Reagan inside and closed the door carefully. Reagan crossed the room and looked out on the fire escape. He drew the curtain and pressed the light switch.

"Interesting warning," he was burning with anger. "Wong is going to step too far out of the line some day and be sorry for it."

WALTON flopped down on the bed. The springs protested under his weight.

"Bob, who the hell is this Wong?"

Reagan seated himself in a small chair and put his booted feet on the bed. He took a cigarette from his case, lit it, and started to puff on it slowly.

"When I was in China," he said, "I came out by the way of Burma and took my boat at Rangoon. I found a Chinese shop there and picked up a little stone Buddha. You've seen it often at the barracks."

Walton nodded.

"A five-inch affair; a fat-bellied buddha with a rope twisted around his neck?"

Reagan nodded.

"It seems that after this Chinaman sold me the thing, he found out it was very valuable. He met me at the dock and tried to bully me into selling it back."

"Which made you stubborn and you told him to go to hell," Walton added.

Reagan grinned.

"That's the story. He threatened me, saying that if I ever returned, he'd make the place miserable for me. After that I forgot about him. I came back home, got tired of doing nothing and joined the flying service. Last month Wong came to me himself, asking about the buddha. I told him I guessed I had lost the thing. He wasn't satisfied. Told me he knew I planned to return to China and gave me another warning. I kicked him out."

Reagan went to his suitcase and drew out a small stone object. He tossed it to Walton.

"This is the buddha Wong sold me in Rangoon."

Walton moved ponderously from the bed. He picked up the stone image and turned it in his hands.

"Something about this thing don't make sense," he said.

"I know," Reagan agreed. "Most buddhas are alike, but this one has a rope about his neck, twisted into a knot behind the ear. Its expression is tortured. That's why I picked it up. The damned thing still intrigues me."

"One more thing," Walton asked, "you wanted to know what ship we sail on. What's this about Wong sailing with us?"

"Just a matter of guess work," Reagan assured him. "I found out that Wong registered at this hotel but checked out the same night he came in.

I figured he saw my name on the register and decided to head elsewhere.

"I called half a dozen hotels and at last found he was registered at the Downing. They told me I'd have to see him at once because he was leaving tomorrow night on a Dutch ship, the *Holland Maid* . . ."

CRASH!

THE glass of the window behind Reagan crushed in, showering splinters on the carpet. A man with small slanted eyes hit the floor and hounded forward. Walton, still holding the buddha, slipped it quickly under the mattress on his side of the bed. Reagan whirled around.

"One moment please."

Reagan whirled again, this time toward the door.

The door had opened silently. A tall, distinguished looking Chinese stood just inside. He held a silencer-snouted automatic pistol trained on them. The little oriental who had come through the window crouched before Reagan.

"Wong," Reagan's eyes widened, "what the hell . . .?"

Wong's yellow, wrinkled face held a triumphant expression.

"Good afternoon, Mister Reagan. I trust my man did not frighten you. It was necessary to focus your attention on the window so that I might enter."

Unexpectedly Reagan swung hard, hitting the oriental with a terrific upercut. The man twisted and fell with a groan.

At the same time, Wong's gun spoke. Reagan dropped to the floor, rolled over and was on his feet again, weaving in with incredible swiftness. Wong raised the gun to fire, but Walton came across the room, hitting him like a freight train. They went down in a hall of clawing, fighting flesh. The gun coughed

again as Reagan started to separate them. The shot tore into the ceiling.

The oriental Reagan had knocked down was arising slowly, cautiously. He had had enough. Unseen he slipped toward the window.

Reagan managed to wrench the automatic from Wong's grasp and Walton sat on the Chinese's belly.

"Get the other one," Walton shouted. Reagan turned. At the window he stopped. The man was already two floors down, dropping from floor to floor with great speed.

Reagan returned to the pair on the floor.

"Let him up," he said.

WALTON crawled off his captive and Wong stood up. He brushed dust off his suit carefully.

"Your friend is rather rough," he said.

"The next time you show your face around me, *you'll* be on the receiving end of this thing," Reagan snapped. He held the automatic in Wong's face. "Now, get out before I change my mind and call the police."

Wong's face expressed no emotion. He turned and left the room. Reagan waited until he heard the elevator door clang. Then he chuckled.

"Plenty of action *before* we start fighting," he said. "Where in hell did you manage to hide that statue so quick?"

Walton went to the bed and reached under the mattress. His face turned an embarrassed red. Furiously he felt around on the spring but he couldn't find the buddha. He straightened, his mouth hanging open foolishly.

"I—I—damned if I know what to say. I put it there under the mattress. The little guy who came in the window must have taken it. It's gone."

Reagan's face was grim.

"So Wong managed that little production all by himself," he said. "I might have known it was too smooth. Shouldn't have let him get away."

"Can't we follow him?" Walton asked eagerly.

"I don't think it will be necessary. Wong is smart. If he has tickets to sail tomorrow night, our being on the same ship won't frighten him. I've an idea we can turn out to be a little more clever than he thinks we are. The buddha wasn't so important, but if I get another crack at Wong, he's going to think an earthquake hit him."

FRANCES WALKER sat quietly in the taxi as it rolled through narrow streets and halted near the end of Dock 17. It was just six forty-five in the evening. The cab driver turned in his seat.

"Seventeen, Miss," he said, and released the catch on the door. He pulled the bill from the meter and passed it to her.

Frances Walker, was a very resourceful young girl. The dark green suit, smoothly combed black hair that came neatly down to the white collar of her blouse, were marks of a business-like, self-contained woman. She bit her lip impatiently, gave up trying to corner a last quarter in the depths of the purse, and passed the driver two dollars.

"Thanks. Keep the change. I'm in a hurry."

She ran across the rain-swept dock and found cover under the high roof. Walking swiftly she found the outer end of the wharf and faced the huge bulk of the ship. *Holland Maid* was painted in black letters on the bow. The girl carried two light-colored bags, a green purse and that was all. Looking in both directions and seeing nothing, the girl was evidently satisfied. She walked swiftly toward the gangplank,

her head down not so much to save her face from the storm as to keep herself from being identified.

Once aboard, she went direct to state-room twenty, tossed her bags in a corner and stripped out of the wet clothes. She wondered now if she had done the right thing. Daddy Walker couldn't send her home when they were once at sea. She had registered carefully under the name of Myrna Lacey.

Before the mirror, with only soft underthings visible on her slim body, Frances Walker realized how utterly feminine and alone she really was. She was suddenly frightened at the task she had chosen, and slipping into bed, she buried her head in the pillow and tried hard not to cry. Her mission in China was definite and clearly outlined. Nothing must stop her.

REAGAN had been right about Wong. The aged Chinese came aboard the *Holland Maid* at ten to seven. Reagan stood on the upper deck and Wong climbed the gangplank without seeing him. He stepped away from the rail, waited until he was sure that Wong would be out of the way, and then went below himself. Walton was sharing his room. They were traveling together according to the ship papers. They were salesmen, interested in selling American-made goods in China. Reagan smiled. A lot of American-made goods were on their way, via the *Holland Maid*.

He wondered who the girl was. She had come aboard hurriedly, making sure she wasn't being watched. Kids like that didn't usually travel alone.

Walton was already lying full length across the bed. He had tossed away his street clothes and was clad in a voluminous blood-red robe.

"My God," Reagan said. "You look like the corpse died red."

Walton sat up slowly.

"If you're trying to be funny . . ."

Reagan chuckled.

"Forget it," he said, then added, "our friend Wong is on board."

Walton reached for his cigarettes.

"Then you were right!"

Reagan nodded.

"At least one very good-looking girl, also," he added. "She came aboard soaked to the skin."

"I'll bet you liked that," Walton said. "Good chassis?"

Reagan nodded.

"The best," he answered, "something out of a fashion book."

Reagan slipped out of his wet shoes and started to dig for some dry ones.

"Funny thing," he said, "I got the idea she was running away from something. She sneaked on board as though a devil or two were following her."

Walton laughed.

"Forget her," he advised. "Probably the law got hot for her in Frisco and she's going to set up business in Rangoon."

Reagan nodded absently.

"Hadden't thought of that," he admitted. "Guess I'll go up and watch us shove off. Want to come along?"

Walton flopped down on the bed again with a groan.

"You and your extra muscles," he said. "Go tiring yourself out. Me, I'm staying comfortable."

REAGAN went out. It was still raining. A few men were on deck but most of his crowd were out of sight below. He went along the deck toward the gangplank.

Someone came through the fog and bumped him on the elbow in passing.

"Pardon me," he said and the man turned around. Reagan was conscious of hateful, narrow eyes focused on him. Then the man turned away quickly and

went into the night.

Hardly knowing why, Reagan followed. He stayed in the shadow of the staterooms until his man went around the corner. Then following quickly, he saw the oriental go down the steps toward the lower deck.

The slant-eye was sneaking along the line of lower staterooms, looking furtively through the portholes as he walked. At last he stopped and studied someone through the glass.

Seemingly satisfied, he drew a small pistol from his pocket, and looked each way along the deck.

Reagan felt the service gun hidden in its holster beneath his coat. He slipped it out quickly. The fog was still thick and it was raining harder. The oriental lifted the pistol until it pointed straight through the glass.

Coolly Reagan lifted his own weapon and pulled the trigger.

CRACK

The man at the porthole grasped his wrist. Blood spurted from his arm and he turned and ran swiftly along the deck. From the stateroom came a high-pitched scream of terror. Doors started to fly open along the deck.

Reagan slipped into the shadows, and made his way back along the deck to his own room.

WALTON was in his trousers when Reagan came in.

"That shot," he said. "Did you hear . . . ?"

"Get your clothes off," Reagan said. "I fired it myself. Get into bed in a hurry. You didn't hear anything."

"I don't get it," Walton said in bewilderment.

Reagan was already out of his jacket. He slipped the holster from his waist and put the gun under his pillow. In two minutes he was in bed.

"We aren't supposed to carry fire-

arms during the trip," he said. "The old man would toss me out of the whole show if he found out."

He told Walton what had happened.

"Those guys are gonna get in trouble yet," Walton said when he finished. "Who was he firing at?"

"He was going to fire at a woman," Reagan said. "I think the stateroom would have been about number 20 or 21. A girl screamed as I shot. If I'm not wrong, it was the girl in the green sport suit."

Walton said softly, "Well I'll be . . ."

"I know," Reagan agreed dryly, "you'll be damned. Now go to sleep."

The ship was quiet, Reagan, partly awake, was trying to piece the puzzle into workable parts. He heard the anchor rattle up sometime around midnight. He rose and looked out of the porthole. The black-out on the dock was perfect. He could see only a few feet of the deck. Sharp, low commands punctuated the fog. The engines under him started a slow, even vibration. The *Holland Maid* was away from the dock and headed for the Pacific.

Before he returned to his bunk, Reagan found two life preservers and placed them beside the bed. He dropped into bed, felt the pillow to make sure the pistol was where he could reach it and dropped off into a fitful, dreamy sleep.

"CAN'T find out a thing about last night." Walton came in from breakfast and flopped on the edge of the bed. They were well out to sea. The ocean was rolling smoothly and the *Holland Maid* forged ahead speedily through the dark, oily water.

Reagan finished tying his shoes and started to buckle his holster under his tweed coat. He thought better of it, and returned the gun to its hiding place under the pillow.

"I'm not surprised," he said in answer to Walton's statement. "There's a lot of monkey business going on. It seems to me that there isn't one person on the *Holland Maid* who cares much about letting his real life become public."

Walton was silent. The whole problem was deeper than he cared to think about. Reagan opened the door to the cabin.

"What's on the stove?" he asked.

"I had eggs and bacon," Walton said. "Not bad, but not enough."

"That's your usual complaint," Reagan said and went out. The sun was trying to burn away a ten o'clock haze. As he walked along the deck, the steady swish-swish of water came up from the side of the *Holland Maid*. He went in the dining room. At least twenty of the boys eating there were fast friends of Reagan's. They showed no sign of recognition and Reagan ignored them studiously. The old man would raise hell if they gathered in groups or revealed their friendship in any way.

The dining room was warm and smelled of frying bacon. Reagan took a small table in one corner, sat down and ordered. In ten minutes he put away the large helping of food. As he was about to leave, the girl of the green suit—wearing a brown sweater now—came in. Her face was very pale.

Her eyes caught Reagan's and for a moment he thought she was coming directly to his table. Half-way across the room she stopped, her face whiter than before. She turned and left hurriedly.

Reagan looked in the direction she had been staring. Commander Channing Walker was seated partly behind a screen, a few feet to the left of him. Walker had a briefcase at his side and was clad in quiet business brown.

Then the girl was afraid of Walker?

Puzzled, Reagan stood up and walked

toward the bar. From this vantage point he was able to see Commander Walker's breakfast companion. He turned casually and his eyes widened with surprise.

Half hidden behind the screen, talking with Commander Walker, was the dignified Chinese, Wong.

HOPING he had not been seen by the pair, Reagan turned and hurried to the deck. The girl in the brown sweater was walking toward the other end of the ship.

Reagan caught up and loitered along perhaps ten feet behind her. The girl turned once, seemed about to speak to him and then went on.

A heavy wind was blowing. It whipped the girl's skirt sharply. Reagan came abreast of her.

"A bit stormy for a morning walk," he said.

She turned toward him and fright was etched deeply in her eyes.

"I'm — I'm afraid I should have dressed more heavily," she confessed. "I hadn't expected . . ."

Now was the time for it.

"You hadn't expected to see someone who was in the dining room," Reagan said gently. "I know you're in trouble. I wish I could help you."

Her expression changed abruptly.

"I don't know who you are," she snapped. "It's none of your business if I am in trouble, but I'm not."

"What about last night?" Reagan persisted. "Oriental gunmen don't prowl around with automatics pointed through portholes at pretty young girls unless there's a reason."

He was staring straight ahead, but he heard the gasp of surprise escape her lips.

"How did you know . . . ?"

The question was breathless—strained.

Reagan took her arm firmly. She stopped, turning toward him, her eyes staring into his.

"Look," Reagan began, "I don't know who you are and it's none of my business. I saw you come on board last night and I knew you were trying to hide from someone. Later I followed a man to your stateroom and shot a pistol out of his hand. Several people must have heard the commotion and yet nothing was said about it this morning. Frankly, Miss . . ."

"Myrna Lacey," she said.

"Miss Lacey, I don't give a damn what your business is here. I want to help you. You need me."

HER cheeks regained some of their color and she smiled gratefully.

"I want to thank you for saving my life," she said. "I'm sorry I can't answer your questions. I don't think I'll need your help again, and for your own good I suggest you don't try to see me."

"But," Reagan protested, "the loveliest girl this side of Rangoon. Surely you're not becoming a hermit?"

She drew away from him and they retraced their steps along the deck.

"I'm afraid I *will* have to stay close to my room for the remainder of the voyage," she admitted. "Perhaps we'll meet on deck some evening."

"Not if I can help it," he answered grimly. "I advise that, after dark at least, you stay close to your cabin. Those killers won't miff another chance."

She shuddered, but made no attempt to answer. They reached cabin 20.

"Someone you saw in the dining room has frightened you into staying in your cabin," Reagan said.

She balked, took her key from her purse and slipped it into the lock.

"All right, Sherlock," she said over

her shoulder. "Who was it?"

"A gentleman named Wong," Reagan answered. "I don't like the man much myself."

A low chuckle escaped Myrna Lacey's lips. She pushed the door open.

"I'm afraid, my hero, that you are entirely wrong about Mr. Wong. He happens to be in charge of purchases for the Chinese Government."

She closed the door quickly behind her and he heard the key turn from the inside.

The girl had placed her thunderbolt well. Reagan would have to keep his lips sealed a little more tightly if Rangoon and Kunming were to be pleasant places for him to stay.

HOW did this girl know so much?

Either she was in a high government place or a clever spy. Reagan's emotions played havoc with him during the next half hour. If she told the truth, Wong was an honest and powerful man of China. If this were true, why had Myrna Lacey been frightened in the dining room? Surely she wasn't afraid of Commander Walker.

She had uncanny knowledge of the group of which Reagan was a member. Myrna Lacey was a good woman to stay away from. Whether spy or not, she had power.

Reagan wandered back to the dining room. Walker and Wong were still at their table. Their heads were low over a number of papers. Disgusted with the mystery, Reagan went below.

He found Walton sitting in a deck chair outside their door.

"Education is good stuff," Walton said as Reagan looked over his shoulder. The book was titled *Night Life In Rangoon*.

Reagan grinned.

"That book is five years old," he said.

"Right now Rangoon is closed up

tighter than a tin can."

Reagan sensed that something was bound to happen soon that would disturb the routine of the *Holland Maid*. There was more human dynamite aboard this tub than he had ever seen packed into ten years of living.

He spent the afternoon drinking at the bar. No mention of the shooting incident came up in the conversation of the day. Someone had thoroughly hushed the whole affair. Once he thought he saw the man who had tried to murder Myrna Lacey. He couldn't be sure, and before he came close to the fellow, he had disappeared into the labyrinth of passages below.

Miss Lacey's cabin was where Reagan could watch it from the upper deck. He stood for an hour, his head bent slightly over the rail, watching her door. No one entered or left the cabin. Reagan had dinner and resumed his post where no one could go near cabin 20 without being seen by him. Soon after dark she came out. She was swathed in a heavy coat, much heavier than the weather would merit. She went quickly to the rail. She carried a small package in her hand.

Reagan saw a man, a dark shadow against the deck, dash from the door of cabin 21. Myrna Lacey's arm went up as though she were about to toss the package overboard. The man reached her side, grasping her upraised arm.

In the brief moment it took Reagan to reach the iron steps, he could not see the couple below him. He went down on the double.

He heard a low cry of horror and saw a body arc over the rail. It hit the water with a faint splash. He reached the deck. Neither Myrna nor the man who had attacked her was in sight. He bent over the rail and saw a black blob floating swiftly toward the stern of the ship.

HE shouted as loudly as his choked voice would allow.

"*Man overboard,*" someone down the deck took up the call. A white uniformed officer reached his side.

"Where—who was it?"

Before Reagan could answer, the First Mate was beyond him, loosening the davits of the life boat.

The next ten minutes were a confused uproar. The ship's engines halted and started to grind in reverse. The sea was quite calm. Reagan heard the shouted orders as the boat was lowered into the water. He wanted to go with the boat, but he could only stand there in the dark and wait.

Half an hour passed. The boat came back. It was lifted up the side and placed in its proper place. The First Mate walked toward Reagan.

Reagan saw the stern jaw and the keen, suspicious eyes of the man and decided to be careful of what he said.

"I think you were the first man to give the warning?"

Reagan nodded.

"I saw someone down there," Reagan said. "I think it was Miss Lacey of cabin 20. She stood by the rail. Then I heard her shout and a splash in the water. I rushed down, but I saw only faintly and I couldn't be sure."

The First Mate snorted.

"I'm afraid you've been seeing things," he said. "Miss Lacey is in her cabin."

Reagan wheeled about. The light was shining from Myrna's stateroom and he could see her moving about inside.

"Wait a minute," Reagan begged. He crossed the deck and knocked on the door. Myrna Lacey opened it. She was clad in pajamas, covered by a heavy, pale blue robe.

"Good evening," she said sweetly.

"I wanted to ask you if you'd been on deck," Reagan said lamely. "There

was someone who fell . . ."

The girl nodded gravely.

"Yes! I know," she admitted. "I heard you shout and rushed on deck. After the boat came back, I decided it was a false alarm. *It was, wasn't it?*"

Reagan hesitated. The First Mate was waiting behind him. A small group had gathered around the rail.

"I—I guess it must have been," Reagan answered weakly. "I could swear . . ."

"I wouldn't if I were you," she said gravely and closed the door.

"You realize, I hope, that you caused a lot of trouble by this alarm?" The First Mate asked.

"I know," Reagan pivoted around, his eyes blazing. "Someone on this boat is nuts and it isn't me. I saw a man go overboard. I saw him in the water waving his arms. By God, I'll stick by that story."

The First Mate frowned.

"Every name on the passenger list has been checked while we were in the boat. No one is missing from the *Holland Maid*. Good night, Mr. Reagan."

THE *Holland Maid* was two days out of Rangoon and Reagan still fought against a blank wall of misinformation. Myrna Lacey had become a first class mystery woman. Although the men of the group dared not gather in numbers, the story went around that the girl, always by herself in her cabin, was a second Mata Hari.

To Crash Walton the story had its funny side. Reagan, emotionally stirred up by the drama he had watched unfold, thought the story was far from funny.

When Walton came down from the dining room on Friday night, Reagan was deep in a book on Hindu mythology. He dropped the book as Walton came in, and saw the worried expression

on Walton's face.

"What's up? Dinner too small for you again tonight?"

"Miss Lacey's sick," Walton said quietly.

Reagan felt his nerves snap alert.

"Seriously?" He tried to be casual.

"I'm afraid so," Walton said, "don't know much about it. The story got around among the boys that she has malaria."

Malaria! The word left Reagan cold.

"How long has she had it?" He was on his feet, pacing the cabin. He tossed a half-burned cigarette on the floor, stepped on it and absent mindedly lighted another.

"I don't know," Walton admitted.

"Guess they don't expect her to live."

Reagan left the cabin and walked swiftly to the steps that led below deck. He went straight to 20 and knocked. To his surprise, Commander Channing Walker answered. The leader looked worn out. His wrinkled, lined face was a sickly white.

"Yes, Reagan. What do you want?"

"I—I, that is, I hadn't expected to find you here, sir. I came to inquire about Miss Lacey. I just heard . . ."

"She had the malaria," Walker said tonelessly.

"*Had?*" Reagan choked. "Then—she's better?"

"Miss Lacey died an hour ago," Walker said. "Now, if you'll please go?"

The door closed in his face.

Walton looked up as Reagan came in.

"Bad news?" he asked, noticing Reagan's expression.

Reagan nodded.

"She died an hour ago." He sat down. He felt empty and washed up. "Damn it, Crash, there's a lot about this whole thing that I don't like."

Walton nodded.

"Me too," he agreed. "Shooting, and a man overboard. Somehow Miss Lacey didn't seem the kind of kid who got mixed up in murders."

"One more thing," Reagan added. "Commander Walker knows the girl. It was he who came to the door of her cabin and told me she was dead."

Walton whistled.

"Then it seems as though Wong, Walker and the girl are in the same boat. Reagan, I could believe that they are all on the up and up if Wong hadn't pulled a gun on us at the hotel."

"Don't forget his men aboard the ship," Reagan cautioned. "They made two attempts on the girl's life."

"I can't forget any of it," Walton admitted sourly. "I'm sorry the kid's dead, but I wish we'd never got mixed up with the mess to begin with."

Reagan went to the porthole and stood there for some time, staring across the open deck at the rolling green water. He turned away finally.

"As long as Commander Walker is mixed up in this, we'd better lay off," Walton suggested.

Reagan nodded.

"Agreed," he said. "We'll be in Rangoon in another day."

RANGOON is the city of a million crows. It's a hodge-podge of India, Burma and China all dumped into a steaming, tropical mass.

When the *Holland Maid* docked, the Japanese had been raiding Rangoon for weeks. Freight was held at a standstill and millions in lend-lease materials were stacked on the docks. A small British R.A.F. group flew from Kye-daw Airdrome at Toungoo, using Brewster Buffalos. The Burma Road, Rangoon and all water approaches were virtually held at a standstill by the cobra-striking Japanese fighter and bomber squadrons.

The city presented an odd collection of Chinese merchants, Hindus, Burmese and British leaders.

Boh Reagan stood at the rail of the *Holland Maid*. Walton had already taken care of the luggage. The gangplank went down as Reagan stood there, watching the coolies working on a huge pile of American goods.

Wong went down the gangplank first. Once more in his home city, the Chinese gentleman wore a long, embroidered robe, black hat and carried a wide fan to waft the stench and heat of the city from his nostrils.

Reagan watched Wong as he approached a long, black car parked at the land end of the wharf. The driver started to hack slowly through the crowd of coolies toward the freight door in the side of the *Holland Maid*.

Reagan leaned over cautiously and saw that Commander Channing Walker was at the opening in the ship's side. The car hacked to the edge of the wharf. A dozen husky deck hands pushed a long, dark-colored box across the narrow chasm of water and Wong helped slide it carefully into place. The doors closed quickly. They must have radioed from the *Holland Maid*, Reagan decided. The car had been ready and waiting.

Reagan went swiftly along the deck and down the gangplank. Walker was ahead of him. Reagan ignored the car, went to the shore end of the dock and hailed an antiquated taxi cab. The dark car rolled past him. The driver, Wong and Channing Walker were squeezed into the front seat. The car moved across the intersection and slowly into the traffic. Reagan didn't worry about keeping up.

Dozens of rickshaws and bullock carts trundled slowly along the street. He tapped the taxi driver's shoulders, pointed after the car and said:

"Don't let them get out of sight. I'll double the price of the ride, get it?"

The driver, a broad-faced Anglo-Indian grinned, showing betel nut stained teeth.

"Me savvy."

The taxi grumbled, jerked twice and rolled away after the car. Reagan found the task of following a simple one. Once or twice as the car rounded a corner, he signalled his own driver to stop. When he was sure he hadn't been discovered, they moved on once more.

REAGAN knew this part of Rangoon well. It was on this very street that he had purchased the strange buddha from Wong. Reagan wondered why a man of Wong's importance had posed as a merchant. Five years was a long time. Perhaps Wong had only recently come to power.

The car halted before a large, Chinese-lettered shop. Reagan recognized it. He motioned his driver to the curb and jumped out.

"How much?"

"Six rupees." The driver grinned, trying to hide the fact that he was charging twice the usual fare.

Reagan passed him three one-dollar bills, well over the figure the driver had mentioned.

"Ding Hoa," the driver heaved. "You are number one fine fella."

Reagan moved swiftly out of sight in the crowd that swept past the shop of Wong.

He approached carefully and stopped at the corner of the building. Wong and Commander Walker were already out of the car, removing the long box from the rear. A murmur of superstition went up and the flow of people swept to the opposite side of the street. Reagan stayed well back in the shadows.

Three Chinese boys came from the shop of Wong and took their places be-

side the two men. They carried the coffin toward the door.

Reagan's eyes were on that box. It was a plain, wooden affair with rope handles.

Myrna Lacey's body was in the coffin. He was sure of that.

What implications the entire venture held, Reagan could not guess.

He waited for several minutes, wondering if he should try to find his way into the store from the rear.

Commander Channing Walker made up his mind for him.

Walker came out suddenly, walked swiftly past Reagan without seeing him and headed for the dock. Reagan darted across the street and jumped into a rickshaw. It wouldn't pay to be caught away from the boys when Walker arrived. They had strict orders not to mingle with people in Rangoon until they had received definite instructions. The American Volunteer Group was still a highly inflammable and well hidden enterprise.

ON the following day, Reagan, Crash Walton and fifty men of the A.V.G. went by river boat up the Rangoon River to Kyedan airdrome. Reagan's mind was continually on Myrna Lacey. However, he noticed that Commander Walker seemed more at ease now, and Reagan let the Commander's attitude influence his own feelings during the day.

There was work to be done, and plenty of it. Nightfall found them installed in the teak and bamboo huts ranged around the field at Toungoo. The R.A.F. had a single line of Brewster Buffalo fighters hidden in the jungle near the drome. The ground crew of the A.V.G. was in, and already at work tuning up and assembling the Curtiss-Wright P-40's. Walton managed to get a hunk with Reagan. At six o'clock

Frank Pastur, first squadron leader, dropped in and they went to dinner at the British mess.

Channing Walker left orders on the bulletin board for a general meeting of the A.V.G. to take place that night at eight. Reagan made up his cot, folded the mosquito netting where he could find it quickly and went outside. The air was hot and still. It smelled of jungle vegetation.

The mess-hall was filling quickly as he went in. Commander Walker sat at the far end, his elbows braced on the hard table. Walker waited until the last of them was seated. He crushed out his cigarette with a calloused thumb and started to talk. His eyes were hard as steel and his face was solemn.

"You men, thus far, have done a nice job. It will take a little time to get our planes into the air. We'll have a fighting power here of about fifty P-40's at one time. I've got to split the force up, taking part of you into China and up to Kunming.

"The Japanese are bombing hell out of Rangoon and Kunming. They are doing their best to stop all movement over the Burma Road. It has been said by a very prominent Chinese citizen that the Burma Road is the 'jugular vein' of China. With the men and planes we have, it's our job to keep God knows how many Japs from putting that road out of commission.

"Each man will take orders from his squadron leader, and each man will do what he has to, while in battle, to bring down the most planes with the least harm to himself, and his plane.

"Remember that the odds against us are so heavy that we won't even think of them. For every plane you bring down, and *prove* you bring down, the Chinese government will pay you five hundred dollars.

"Tomorrow we start drilling and I'm

going to tell you everything I know about the Japs and the way they fight in this country. I trust every man of you to fight for the American Volunteer Group with a sense of pride that will never waver. You are working as a team, each man helping his buddy. If the going gets too tough, hit the silk. Remember that as few planes as we have my men are still the most valuable item of the command. That is all . . ."

BOB REAGAN left that meeting with a fierce, new pride. For the next week he forgot the incidents aboard the *Holland Maid*. He thought only of the long hours in the air, the lengthy "chalk-talks" given by Walker. He found that the P-40, with its two fifty-caliber machine guns, and the four thirty-caliber guns in the wings, was flying dynamite. In a dive he could hit six hundred miles an hour, but in quick turns the Japs had the upper hand.

Some of the boys had tough luck. Frank Pastur's job acted up and burst into flames over Rangoon. Frank nursed it out into the country, hit the silk and came down in a rice paddy with a broken ankle.

Still no Jap planes came over Rangoon.

Reagan and Walker, with Frank Pastur bouncing gayly along on crutches, went into Rangoon and spent one evening at the Silver Grill. It was the finest night club in the city. That evening turned out to be hell. The wealth of loveliness displayed on the dance floor started Reagan thinking once more of Myrna Lacey.

The following day at mess, Commander Walker seemed more excited and gay than he had been for a month. After he had eaten, Walker rose, waited until the men were silent and started talking.

"A number of things happened

aboard ship during the trip that may have caused gossip among you men." He hesitated and Reagan fancied Walker's eyes were boring into his. "I'm sorry I can't give you a full report. Unfortunately some things have to remain political secrets.

"I can say that an attempt was made on a certain Myrna Lacey's life. At the time I did not know that Miss Lacey was aboard ship. Later, when Wong gave me the full details, we acted to save Miss Lacey from further trouble.

"Miss Lacey was spirited ashore and news was given out that she had died of malaria. The danger, at least for the present, is past. I would like very much to present . . ."

Walker stopped talking as Myrna Lacey walked calmly through a side door and stood quietly at his side. She wore the same green suit that Reagan had seen the night she came aboard ship. She was more lovely than ever, tanned and smiling happily. She nodded her head slightly in Reagan's direction and he grinned foolishly, dazedly at her, not knowing what else to do.

"I feel it only fair to the men of the group," Walker was saying, "to introduce my daughter, Frances Walker."

Reagan started, felt his blood turn cold then hot again. Color mounted to his cheeks. There was no doubt that Channing Walker's steady smile was aimed directly at him.

Reagan felt like a fool. The Commander hadn't known that Myrna (it was Frances now) had come aboard at Frisco. That explained why she had acted so oddly. She didn't want her father to know at the time, fearing he would send her home.

"Frances has told me that one of my men saved her life that first night aboard the *Holland Maid*," Walker was talking again. "I'd like to thank Robert Reagan, Second Squadron Leader, for

firing the shot that saved her life."

A round of applause followed the announcement. Reagan slumped down, trying to hide himself in the crowd.

NEW incidents piled up so speedily in the next minutes that Reagan never quite classified them properly.

The lights on the mess hall dimmed, flashed bright and went out. The siren at the far end of the field wailed, low at first and then with the scream of a banshee. A man from the interceptor office dashed in.

"Japs approaching Rangoon," his voice, young and excited, sent every man toward the door. Reagan heard Walker shouting.

"Squadrons one and two get to twenty thousand and wait over the bay region. Squadrons three and four stay on the ground. Be ready to take off when you get the command."

Reagan dashed down the field. The P-40's were already idling. The moon was up and the ground crew hovered over the ships, waiting. In the ready room Reagan found his own men, Walton, and Frank Pastur.

"What the hell, Frank," he was worried about Pastur's ankle. "Can you fly with that thing?"

Pastur's eyes were shining.

"Sure," he said, "I waited a month for this. I'd fly a wheelbarrow without a wheel."

Orders were to take off at once. Reagan checked his men quickly. Swanson, Waterbury, Reynolds—down the list. They were all there. In five minutes he was in the air with his men spread out on each side. Dipping his wings slightly, Reagan gunned the plane and went into the clouds above the city. Rangoon was visible below, through the floating cloud banks. Then came the endless sweep of the green ocean. He spoke over the radio mouthpiece.

"See anything, Crash?"

Walton, flying close to Reagan's left wing tip, chuckled.

"I think I see big rats about twenty miles out, at about fifteen angels."*

"Bombers at fifteen thousand feet," Reagan said to himself.

He strained his eyes, picked up the specks over the water and said:

"Get upstairs, boys. We're in for some fun."

There were at least twenty bombers coming in. They flew low and straight, headed for the docks at Rangoon. Above the bombers, small, speedy Jap fighters soared at about seventeen thousand.

They were almost underneath Two Squadron now. Reagan's ship nosed over and pointed down into the formation.

"Leave the fighters alone. We want those bombers."

He heard Walton chuckle over the earphones and saw his buddy's plane nose down after his own.

Reagan put his sights on the first bomber. The Japs saw them coming and the fighters peeled off and came up. Reagan didn't even open fire as they swept past. He was close to the big job now.

The Japs' turret cannon was pounding lead up at him. The P-40 hit six hundred, the bomber seemed to grow large, blotting out the sea underneath. Reagan pressed the firing button gently and felt the force of the guns hold him back. Then he tripped the P-40 up in a sharp turn, shook the fog from his eyes and looked back.

The bomber was rolling downward slowly toward the water, thick black smoke pouring from its engines. He had no time for a second look.

* The new group had already coined its jargon. Big rats were the Japanese Nakajima bombers. Small rats were the Nakajima fighters. Fifteen angels was fifteen thousand feet.—Ed.

TWO Jap fighters dropped out of the clouds and came down straight for him. He had lost the members of his squadron, but knew by now One Squadron would also be in the thick of it.

He banked, flew straight away from the Japs, and his superior speed took him out of range. Doubling back, he flew low. The fighters were trying to get out of his way.

Reagan went straight up under them, climbing fast. The Japs saw him coming, lost him in their blind spots and tried desperately to get out of the way.

Reagan knew what the P-40 would do. He kept climbing under their bellies, ready for a swift *uppercut*. The first plane was in his sights now. He pressed the firing button, tipped the nose down slightly and fired the guns again.

The first fighter went to pieces in the air. A part of the wing hurtled past Reagan's plane. The rest of it just disappeared.

"Damned caskets," he whispered. "Should have bullet-proof tanks."

The second fighter was fleeing. Reagan got on its tail and stayed there. He kept his finger on the button and watched the lead pound into the plane ahead of him. The Jap pilot stood up suddenly, tried to bail out and his chute caught. The plane and pilot dove toward the water, hurtling downward at full speed. It hit, sending up a small splash and a quick mushroom of smoke.

Reagan looked around. He must be ten miles out. Not another plane was in sight. Toward Rangoon, all had been silent. Had they turned all the bombers back? He looked at his tank.

Nearly empty.

He turned, found himself on the compass and headed straight for the Kye-daw Drome. He landed with a pint of gas left in the tank.

Walton met him as he climbed wear-

ily out of the plane.

"I got my first," Walton was jubilant. "Fought off a fighter and knocked one of the big boys straight to hell."

"I put three out of commission," Reagan admitted. "Saw two of them hit. The third one blew up."

Walton crossed the field with him and they met Commander Walker just outside the communication shack. He shook hands with both of them.

"Nice work," he said. "With the help of the R.A.F. we turned back sixty bombers and half as many fighters. You boys got *blooded* nicely. Squadron One took a dozen down with one loss. Your gang cleaned up on another ten."

"Any of our boys killed?" Reagan asked.

Walker smiled.

"The A.V.G. doesn't kill easily," he said. "No, Frank Pastur had trouble with that ankle of his. Went down in a swamp near the city. He just called from Rangoon and said he'd be 'home' by hullock wagon in a couple of hours."

"Good," Reagan said. "I'd—I'd like to thank you for saying what you did before we went up. Could I possibly see Miss Walker?"

WALKER'S face clouded slightly.

"Look, Reagan," he sounded very concerned, "you did me a great favor. At the same time, you've pushed yourself into a lot of trouble that doesn't concern you. It might be wise if you stayed away from my daughter, at least for the present. I'm afraid the trouble here isn't over with."

Reagan felt a stubbornness grow inside him. Walker was the high man here, but a man's liberties should be determined by himself, at least so far as private life was concerned.

"About this man, Wong," Reagan persisted, "he pulled a deal on me that I don't like. It's all intermingled some-

how with your daughter. I'd like an explanation from someone."

Channing Walker seemed for a moment to be deep in thought. At last he made a decision.

"I'm sorry, Reagan, but for the present we can't discuss it. Wong is a famous and very powerful man. Take my word for it. Whatever he did that seemed to hurt you, was for your own good. Don't get the idea that Wong is a crook. He's placed here by the Chinese High Command to finance and take care of this flying group. Whatever he did to you, *he did with my consent.*"

"But I don't . . ."

Walker was impatient.

"I don't understand it all myself, yet," he admitted. "Just do your job and stand by for trouble. If I need your help, I promise to call on you. I owe you a lot and I won't forget it. Gonna be good?"

His eyes twinkled suddenly and he beld out his hand.

Reagan grasped it firmly and they shook.

"I'll be good," Reagan agreed. "But—if I can help, let me know."

Walker nodded and turned away. Reagan went down the path toward the living quarters.

THE little men of Nippon knew at once that a new and terrible fighting force had assembled near Rangoon. Radio Tokio guessed wildly and broadcasted that hundreds of American planes were in the fight. Commander Walker put ten planes in the air and made them *fight* like a hundred.

The Japanese had a religious fear of the shark. The A.V.G. adopted the red tiger shark's mouth, fierce white teeth and evil eye. They painted this insignia on the noses of the P-40's and whined into battle, tearing hell out of every Jap formation that came over.

Bob Reagan, Crash Walton and Number Two Squadron were in the thick of it. Number One, commanded now by Frank Pastur, left in the early summer for Kunming.

The Southwest Transportation Company hauled all freight from Rangoon into China. Their huge, bulging *godowns** filled with Lend-Lease material gradually emptied. Shipments were going through on time.

Reagan took no time off for entertainment. Number Two Squadron had lost three planes and one man in five weeks of fighting.

Reagan spent most of his day in the *ready* shack, waiting for the *warning* net to broadcast Jap locations. The Chinese had established radio men, sometimes within a stone's throw of Japanese flying fields. Every Japanese plane to take the air was carefully reported long before it came over Rangoon.

Reagan grew hard in those weeks. He suffered from a slight flesh wound on the cheek that left a glowing, red scar. His eyes grew deep set and he forgot to shave for days on end. The fight was stiff and up hill. Sometimes he had five men in the air with him, against fifty Japanese bombers and fighters.

Channing Walker went to Kunming in November. He left Reagan in charge of two squadrons, the second and the fourth. Reagan was becoming irritable. He drove the men and they resented it. Finally, late in the month, Walton cornered him when Reagan came in from mess.

"Some of the boys going in to the Silver Grill tonight," Crash said bopefully. "How about going along?"

Reagan shook his head.

"Sorry," he said, "I'll have just five men bere. I want to see that those two ships that were shot up today get a

* Godown—warehouse.—Ed.

good doctoring."

Walton took Reagan's shoulder and turned him around gently.

"Look, Bob," Walton was deeply concerned. "You've been hitting this thing too damned hard. The boys say you're getting as tough as the old man. Just relax for a few hours, will you?"

REAGAN jerked away rudely, found a crushed cigarette pack on the table and lighted the last one. He ripped off his jacket and flopped down on the bed.

"This field is going to give over to the Japs one of these days," his voice was low and bitter. "If we had a hundred more men we could lick the whole damned Jap Air Force. As it is, they need me here all the time."

Walton grinned in spite of himself.

"We ain't doin' so bad," he protested. "Two raids today. Ten planes against their hundred and we knocked down six for sure and ten probables."

Reagan twisted around.

"Did you ever hear any more about Miss Walker?" he asked.

"Oh!" Walton sat down at his side. "So that's it? Carrying a torch for the kid?"

Reagan crushed the cigarette out between his finger tips.

"It's been bothering me," he admitted. "I haven't any right to fool around the old man's daughter, and he as much as told me so. Crash, you and I are old friends."

Walton nodded solemnly.

"Just between you and me, I fell in love with Myrna Lacey that first night in Frisco. When she became Frances Walker, it couldn't make any difference in me, but it made a hell of a lot of difference in our social standing."

"Nuts," Walton grunted, "if you like the girl . . ."

"I do," Reagan groaned. "But she

hasn't shown up here since the night of the first attack. Doesn't that prove anything?"

Walton hesitated. He had seen Frances Walker several times in Rangoon since that night. She had danced with her father at the Silver Grill, before old man Walker went up to Kunming. She was still here, in the care of Wong. He hadn't spoken of this to Reagan because Reagan hadn't encouraged any talk when they weren't in the air.

"It proves that no girl on earth will chase a guy around if she has one ounce of character," Walton said coldly. "You haven't tried to see her, have you?"

Reagan turned red.

"Been so darned mixed up," he admitted, "I didn't think of that."

Walton turned to his locker and started to drag out his jacket.

"You'd better," he suggested.

"You say you're going to the Silver Grill tonight?"

"Right," Walton admitted. "Got two or three little half-caste babes there that are plenty potent."

"Leave your razor out," Reagan said quickly. "I'm taking a last look into the communication room. I'll see you at the Silver Grill in an hour."

THE Silver Grill was Rangoon's richest night spot. Before the war, the cream of the city danced and quenched its thirst there. A nice distinction existed between the daughters of the better families and the lower, half caste women who stayed away to save themselves the embarrassment of being asked to leave. The Grill had to about face when the Flying Tigers hit town. No man or woman in Rangoon turned away from the uniformed American boys. They were the bonor guests of the city and the Silver Grill was turned over to them from wine cellar to dance floor. They chose to bring a

few dark skinned, hot numbers with them, and this nearly created scandal. Nearly, but not quite.

The Tigers landed and they did as they wished. The Silver Grill changed its rules to fit their specifications.

Reagan came in, left his flying cap at the check room and drifted into the silvery, dream world atmosphere. It was just after ten in the evening. Crash Walton and a couple boys from the squadron were well occupied at the bar. Reagan, feeling very much alone, went among the tables and sat down. A waiter came at once and he ordered a martini.

He saw the stern, well-tailored figure of Wong, sitting alone on the far side of the room. Reagan took his drink, crossed the room and stood before Wong. The old man looked up and a smile flashed across his face. He arose and offered his hand.

"Mr. Reagan, you haven't been in Rangoon for some time?"

Reagan shook Wong's hand and sat down.

"No, sir," he admitted. "Been pretty busy up at Toungoo."

"Yes," a flicker of a smile crossed Wong's lips. "Miss Walker and myself have often watched you being *busy*, over the city."

Reagan blushed.

"Miss Walker is well, I hope," he tried to say it without appearing too anxious.

"Quite well, thank you." The soft, feminine voice came from behind him.

Reagan twisted about in his seat. Frances Walker had been standing near his shoulder.

"Good evening, Mr. Reagan. I've been wondering if you forgot us entirely."

Reagan stood up quickly. Frances faced him with a friendly smile. She was clad in an evening gown covered

with silver sequins. The white silk cape and tiny hat of the same material made her as rare as an angel.

"I—I didn't hear . . ." Reagan gulped.

She put a soft hand on his arm.

"I came in quite silently," she admitted. "I thought perhaps you would say something nice about me if you didn't know I was here."

WONG and Reagan arose and the girl sat down. Drinks were ordered around the table and the conversation drifted quickly to the Flying Tigers and the chances of Rangoon being held.

"You Americans are doing a fine job," Wong admitted at last. "But there are a few dozen of you fighting the entire Imperial Japanese Army Air Force. We'll always be indebted to you for holding the Burma Road open as long as you have. Nothing can stop the Japanese for the present. They will take Rangoon before the next year is finished."

"Then you don't think the English or my own people will arrive in time to save Burma?"

Wong shook his head.

"It might be interesting for you to know that my *store* here in Rangoon is a clearing house for Chinese information and important material. We are planning on closing it in January. Miss Walker and I will go to Kunming in February. You and your squadrons will be in Kunming long before that. The *dacoits* and thugs are already robbing and pillaging in the lower city."

Frances Walker's breath hissed in suddenly. Reagan saw that her lips and face were white, her eyes focused across the room.

"*Baumo Gali*," she pronounced the name slowly, with hatred and fear in every syllable.

Wong did not turn. Reagan heard the Chinese's feet scrape across the floor under the table. Wong's face was expressionless, his voice calm.

"I didn't think he would dare come here," he said. He seemed to ignore, to forget Reagan. "You must get out at once. We will take a taxi direct to the store. I will see that he is driven from Rangoon."

Frances Walker stood up. She smiled wanly at Reagan.

"Look," he protested. "If something is wrong, I want to help. You both ignore me when trouble comes."

Frances hesitated, as though about to tell him something. Wong took her arm firmly. He turned to Reagan.

"This does not concern you," he said softly. "We have no time to waste. The girl's life is in danger."

He arose, and Frances followed him.

Reagan sprang to his feet. As he did so, his eyes caught the slightly built oriental who was moving toward the door on the other side of the room.

It was the same man who had tried to shoot Frances Walker aboard the Holland Maid.

"Baumo Gali," Reagan whispered musingly. "Wonder if you'd like a sock on the kisser?"

Somewhere on the roof an air raid siren started to blast its warning. Reagan heard one of the English Brewster Buffalos roar over the Silver Grill. The Japs were on their way.

The lights went out and the room was vast and black. Somewhere in front of him, near the door, Baum Gali was moving stealthily toward Frances Walker.

"*Ching Poo*," the Chinese warning voice cut the silence; "*Air Raid*."

THE faint hum of enemy craft sounded across the water to the south. Reagan went swiftly toward

the door. Light was filtering in. The moon was bright and he saw Wong's figure silhouetted against the open door. Then Frances Walker went out swiftly behind him. Reagan tried to find Gali, tripped over something and almost fell. A gun cracked and an orange flame split the blackness.

Reagan side stepped and came even with the man who had fired the shot. He saw the ugly, squint-eyed Gali close to his elbow.

Outside Frances was running across the walk. Wong was with her, holding his hand tightly to his shoulder.

Reagan saw the outline of an arm come up. He grasped it quickly and throwing his weight against Gali, tossed him to the floor. Women were screaming and fighting their way to the entrance. The gun exploded close to Reagan's face. An oath ripped from the lips of the man under him. Gauging the distance quickly, Reagan sent his fist crashing down against Gali's chin.

He heard the gun clatter on the floor and the man under him was silent. Planes were overhead now. Already he could make out the thin, ripping sound of machine guns, cutting the night.

Reagan dashed out. The street was deserted.

He wondered if he could make the field. A stick of bombs dropped. The first one was a block away. Reagan saw them as they exploded, spaced so they would hit in a straight line.

There was a small, brick ditch running along the curb. He dropped into it. The bombs hit swiftly, pounding into the street and deafening him. The last of the stick carried on past his retreat and hit the corner of a building down the street. Half of it crumbled into the street and a fire broke out.

He wondered if he should try to make

the drome, realized the Japs were already heading for home and thought better of it. Reagan decided to find Wong and the girl and get an explanation. If Wong was responsible for her continued danger, something must be done about it at once.

Rangoon was a shambles. Fires had broken out and were raging across the entire water front. Reagan fought his way against the tide of coolies headed out of the city toward the jungle. He found Wong's shop and managed to fight his way to the door.

WONG's establishment hadn't been touched. It was a fairly large place, housing oriental odds and ends. A combination dry goods and antique shop.

Reagan pushed the door open and went in. There was no one behind the counter. He wandered about for a minute, then went toward the wide flight of stairs that led to the second floor.

Hesitating, he climbed slowly, wondering if Wong had brought Frances Walker here or if they had been caught somewhere by the raid.

He reached the head of the stair and found himself in a plain, very large living room. There were several low divans, two teak chests and a small, well-built safe. Reagan went to the window that looked down on the street.

Frances Walker's head was just visible in the throng that moved toward the store. Wong was at her side.

Reagan sat down on a divan. He heard the front door open. Wong came first, seemed surprised at sight of Reagan, but controlled himself.

"It is Mr. Reagan," he smiled. "We meet often tonight."

Frances Walker came straight to him and held out her hands. He took them in his own.

"What happened back there," she shuddered, "after we escaped?"

Reagan smiled.

"A number of things," he admitted. "For one, this Baume Gali took another shot at one of you."

She squeezed his hands in her own.

"I want you to know we appreciate it." She hesitated and turned to Wong. "Can't we tell Mr. Reagan? He's helped me a great deal from the very first."

Wong shrugged. Reagan saw the bandage on his shoulder and knew they must have stopped to see a doctor before returning to the shop.

"Your father would not approve," Wong said meaningly.

Her eyes flashed.

"I'm tired of what he does and doesn't approve of," she said sharply. "I know he has to show authority to keep his men in line. This thing, however, has gone beyond that point. Mr. Reagan deserves an explanation."

A slow smile broke across Wong's face.

"I have waited for those words," he said. "I did not expect a woman to show such spirit. Yes, I think that Reagan should know the whole story. We are going to need his help."

He turned to Reagan.

"If you will sit down, I will try to be brief."

REAGAN, the girl's hand still in his, crossed the room and sat awkwardly on the divan. He felt the girl's hair brush his cheek, her body move against him as she breathed. There was a loneliness in her that made him want to put his arm tightly around her.

"You may have thought me your enemy," Wong said. "I assure you that although I may have lied and used methods of violence, I was attempting to keep you out of something that could only bring you trouble."

Reagan sat still, waiting. He didn't entirely trust Wong.

"It all goes back to your early trip to China and Burma, five years ago."

Reagan nodded.

"You showed certain, er, interest in a buddha I purchased."

Wong smiled.

"That buddha was brought to me by a *dacoit* who stole it from the Shwe Dagon Pagoda."

"Shwe Dagon," Reagan said. "Let's see, headquarters for a sect of priests, is it not?"

Wong nodded.

"They are religious stranglers. They worship the patron goddess Kali. Every person they strangle is a sacrifice to the Goddess of Destruction. After I had sold that buddha to you, a priest, Shano Gali came to see . . ."

"Hold it," Reagan pleaded. "Any relation to this gunman, Baumo Gali?"

"Father and son," Wong said. "But let me go on. Shano Gali, was a political friend. He said the buddha, a precious thing, had been stolen. He asked that I watch for it, knowing that I dealt in such items. Naturally I asked what the reward would be for its return."

"The old priest's eyes grew hard. 'To anyone who touches the sacred symbol of Kali, will come the death of the thuggee, the strangler.'"

"You can understand where this put me. I didn't want him to know that I had had the thing in my possession. I was afraid you would make your possession of it a public fact and bring death to us both. I rushed to the dock and threatened you in such a way that I thought you would be very careful not to mention the buddha as long as you remained in Burma."

"I can understand that," Reagan said. "But, why all the dramatic acting in the States. They surely couldn't reach me there?"

"That," Wong said, "is quite another matter. When I saw your name on the list of pilots who were coming here, I tried to warn you away. I was afraid that in some manner you would betray both yourself and me."

"Then why the devil didn't you tell me the whole story," Reagan exploded angrily. "I'm not a kid. I would have listened."

Wong smiled wearily.

"I don't think you would have understood then," he said. "It took the strange events that followed to open your eyes. You trust me now because you want to, and because you value the opinion of Miss Walker."

REAGAN realized that in the unfolding of the story, Frances had not been mentioned once. He turned to her now, and saw that she had been watching him closely.

"He tells the truth," she said. "Wong is an old friend of our family. I sat on his knee when I was only five. He found out that somehow two thugs had followed him to America and were also trying to trace the buddha. Because he feared for your safety, he stole it from you that last day at the hotel."

"Then you know the whole story?" Reagan asked.

She nodded.

"Wong came to me and asked that I bring the buddha here. He knew that he would be murdered and that it would be found among his possessions. We both thought that I, traveling under an assumed name, would be completely safe from harm."

Wong looked concerned.

"Had I realized that Frances also was being watched," he said, "I would never have allowed . . ."

"You need not apologize," the girl said quickly. "I took the risk and I'm going to see it through."

"But the events on shipboard," Reagan protested.

Wong held one hand up in a gentle motion of restraint.

"I first realized that Frances was in danger the night you saved her life. Evidently one of the thugs knew she had the buddha, and decided to kill her and reclaim it at once."

"But why with a pistol?" Reagan protested. "I thought they strangled their victims."

Frances Walker gripped his hand more tightly.

"That is one of the things we cannot understand," Wong said. "After that, I told Channing Walker the entire story. We decided that Frances should toss the buddha into the sea. That it wasn't worth the trouble we had taken."

"That was the night you saw me," Frances offered. "A man tried to take the buddha from me. Somehow he slipped and went overboard. I was so shaken that I kept the buddha, returned to the cabin and refused to admit I knew anything about it. I didn't dare say anything until I had talked with Dad and Wong."

"After that," Wong added, "we knew that Frances was constantly in danger. We let the news go about that she had malaria."

"I know," Reagan said. "I followed you here. I saw the coffin."

THE girl's lips parted in pleased surprise.

"You were that interested in me?"

Reagan colored slightly.

"I—that is—the whole thing had interested me," he admitted.

"There is little more to tell," Wong went on. "We wanted to return the buddha to Shano Gali, tell him our story and rely on his word that under the circumstances we would not be harmed."

"Before we could do so, Baumo Gali came to us, demanded the buddha and became very angry when we said we knew nothing of it. I did not dare turn the thing over to anyone else."

"But surely," Reagan protested, "it hasn't taken all this time to contact the high priest?"

Wong nodded gravely.

"Much longer, I'm afraid. The old priest Shano Gali is dead. He was killed in a raid the day before the *Holland Maid* docked. I do not trust this man Baumo. He tried to do away with us both."

Wong arose and crossed the room to the safe. He twisted the dial expertly, and drew out a small package.

"And all this difficulty over an idol."

Reagan tore the package open and stared at it with a puzzled expression. He turned it in his hands slowly.

"To think that men are ready to murder for such a thing," Frances Walker shuddered. "And you had it in your possession for five years."

Reagan looked at Wong.

"I'm afraid," he said, "that there is more to the story than even you have guessed. The buddha I owned had a rope twisted about the neck. *This is not the same idol that you took from my hotel room in San Francisco.*"

FOR an instant the room was deathly silent. Wong's face held no expression, but his eyes glittered strangely. He reached out and took the buddha in his long-nailed fingers.

"*You are sure?*"

"I owned the other one for a long time," Reagan said coolly. "It had a rope twisted about the neck. This is an ordinary buddha, and the only resemblance is in the size."

Frances Walker's eyes were questioning them both.

"I—I could be mistaken," Wong ad-

mitted. "It has been a long time."

"You are," Reagan arose. "Now, what does this do to the story you told me?"

Wong seemed deep in thought. He turned the buddha over and over in his hands.

"I was puzzled by several things," he said at last. "First, why should the thugs follow me after all these years. Why did they make those attempts on Frances' life, when . . ."

"I don't know," he said at last. "More and more, as time passes, I am sure that this buddha should not fall into the hands of Baumo Gali."

"Why do you say that?" Reagan demanded.

"Because," Wong said slowly, "although he claims to be the son of Shano, I did not know Shano had a son. Lastly, although I cannot be sure of his dominating caste, we are at war with Japan and I detect certain Japanese traits on the methods and appearance of Baumo Gali. We will have to hide the buddha well until its mystery is solved."

Reagan stood up. He took the buddha from Wong's hands.

"From now on," he said quietly, "I'll take care of it until we are able to find an intelligent explanation."

"But you can't," Frances protested. "You've already done more than you should."

"I believe Mr. Reagan is right," Wong said. "I now have instructions from your father that you and I leave for Kunming tomorrow by plane. Reagan can keep the buddha secreted near him and perhaps with us all out of Rangoon it will be the last of our troubles. At least he is better fitted to dispose of it than you or I."

Wong reached for Reagan's hand and gripped it tightly.

"We managed to involve you in a dangerous problem, and you have helped

us greatly. Please accept my gratitude, for Frances Walker, myself and—for China."

Reagan grinned.

"I hope it isn't *that* serious," he said.

Wong was grave.

"I would not let that buddha pass out of my hands until we are sure of its significance," he cautioned. "You will see us in Kunming soon. Channing Walker can decide what is to be done with it. Until then, good luck."

FRANCES accompanied Reagan down the stairs to the main shop. They stood in the semi-darkness, both drawn close by the events of the past few months. Both ill at ease because they had had little chance to know each other fully.

"I'm very grateful," she said.

Reagan, the buddha tucked tightly under his arm, felt uncomfortable.

"I've been doing a lot of thinking about what I was going to say when we met again," he said. "Now I can't think of a darn thing."

"Anyway," he added, "I'll be seeing you in Kunming."

He turned and opened the outer door.

Across the street, Reagan saw the shadow of a man. He stepped back inside hurriedly. Frances was on the stairs.

"Is there a back door out of here?" he asked.

"Someone is watching?" Her voice was tense.

He nodded.

She led him through the collection of oriental things to a small door that opened into the alley.

"Be sure and make that plane tomorrow," he whispered. "I'll feel better when you reach Kunming."

She squeezed his arm warmly.

"Don't worry about me," she said. "Be careful of Baumo Gali."

Reagan looked down the narrow alley. No one in sight. He walked quickly toward the street, turned and saw the watcher still hovering near the store entrance. For the time being he was safe.

THE Kyedaw drome was badly wrecked. The Japanese had sent a special flight of bombers for the Rangoon melee. For weeks now, Radio Tokio had claimed and reclaimed that the Flying Tigers had been wiped out. After each flight, Tokio announced wild dog fights in which they said dozens of Flying Tigers were shot down. This, considering the entire force amounted to about eighty ships, provided Reagan with a chuckle.

Reagan could see the damage as he approached the field. Half a dozen Brewster Buffalos had been caught cold on the edge of the field. They were still burning.

A P-40 sat nose down in a bomb crater with one wing crumpled under it. The rest of the Tiger planes were drawn into the jungle at the edge of the field and the ground crew was busy doctoring them.

Reagan went immediately to the operations shack. As he came in, Williams, swarthy-skinned Three Squadron leader met him at the door. Williams' face was sober.

"I shouldn't have gone into Rangoon tonight," Reagan said. "Needed both squadrons here under the circumstances."

"Forget it," Williams grinned. "I've got a nice bunch of boys. We shot a lot of them down at that, Reagan, but I think this is about the last week we'll go through."

Reagan went inside, picked up the reports and started to read them carefully.

"Sighted forty bombers, twenty fight-

ers at fifteen thousand over the city—went upstairs and came down wide open. Tore apart the formation and shot wings from one fighter—got three bombers."

He turned over another page. There were more like that. Simple summaries of ten men against perhaps three hundred Japanese. Reagan tossed the reports on the table.

"Did Crash get back from Rangoon?"

Williams nodded.

"Got out here about an hour ago," he said. "Took his plane up and said he'd come back when he'd bagged a couple of slant-eyes."

Reagan swore softly to himself.

"He didn't have much gas," Williams added. "But all the same I've had some flares lighted on the field just in case he makes it."

Reagan took the reports over to the main office, and put them in the safe. He still carried the buddha that he had brought from Wong's shop. Slipping it into the safe also, he placed a stack of blank flight-check cards in front of it, twirled the dial and went outside.

THE fires of Rangoon still lighted the sky. The field was almost clean once more. The wrecked P-40 had been drawn to one side and the bad wing taken off. The bomb crater was half full and fifteen or twenty coolies labored at the task of leveling the earth.

Reagan lighted a cigarette and wandered to the communication room. A Chinese youth, Hoa Sen, was leaning over the set, earphones glued to his ears. Reagan tapped him lightly on the shoulder.

"Hear anything from Mr. Walton?"

The boy shook his head.

"Sorry, no pickup message since half an hour ago," he said quietly. "Warning net say interceptor near Salween

River see Fei Hu* chasing two Nakajima fighters."

Reagan turned quickly and ran out to the field. His plane was camouflaged under the trees close to the main office. The motors were idling slowly and the ground men were checking his instrument panel. Reagan saw a freckled red-head come over the edge of the cockpit as he approached.

"Going upstairs, Captain Reagan?"

"Guess I'll have to check up on Crash Walton," Reagan said. "He's been seen over the Salween."

The red-head dropped to the ground and a whistle escaped his lips.

"He'd better come back," he said. "That's bad country over there."

Reagan was already in the cockpit. The plane was in good shape. He gunned it quickly once and felt the surge of power shoot into the engine. With a grim look he took off and straightened out to the west toward the rugged country of the Salween.

For twenty minutes he flew like an arrow, staying high in the cloud banks. Checking the radio once he picked up the communication room at Kyedaw.

"Reagan reporting. Any word from Crash Walton?"

A negative answer sent him ahead with renewed speed. The Salween, a tiny winding stream that shone like quicksilver, came up under his left wing. Reagan banked gently and followed the canyon for five minutes. Once he thought he saw the flash of a plane a long way below him against the valley. He went into a power dive, leveled off at a thousand feet and found nothing.

He hated to give up. Planes and men were more important now than they had ever been. But he couldn't afford to crash himself. Reluctantly

he turned and streaked for home.

REAGAN slept fitfully that night. Walton had been the only close friend he had ever had. It was Walton's own fault that he went out alone and didn't have sense enough to turn back. Still, for all that, Reagan found little comfort in Walton's thoughtlessness.

There had been two more losses the day before. The P-40 that crashed on the field had killed a new man in the third squadron. One of Williams' men also had crashed on the roof of a godown in Rangoon. The British had lost three Brewster Buffalos.

Reagan took half a dozen men up at noon and stuck in the clouds over the sea. No Japs came over. He knew they were ready to strike the death blow soon. Rangoon was badly hurt. The British had long since given up Singapore and Thailand. Rangoon would be next, and then the closing of the Burma Road.

Reagan returned to Kyedaw, made sure that the warning net reported no more Japs on the way, and started to pack his luggage for the evacuation to Kunming.

Late in the afternoon the Asiatic Airways plane took off from the Rangoon field and flew low over Toungoo and the Kyedaw Drome. Reagan watched it roar over and hoped that Frances Walker and Wong were on board.

At five in the afternoon, a message from Commander Walker was posted on the board.

"JAP INVASION RANGOON
SCHEDULED SOON. PLAN
EVACUATION AND STICK IT
OUT AS LONG AS YOU CAN.
SEND GROUND CREW KUN-
MING AND FLY YOUR
PLANES UP TO COVER

* Flying Tiger.—Eo

THEIR RETREAT.*

THE next morning was fine for fighting. The sun came up clear and hot. Rangoon, deserted and smouldering, was a vast graveyard of war materials. The docks were strewn with stuff that was meant for China and would never go through. Reagan hid his squadron at twenty thousand feet, just at the edge of the city. The water glistened far below on the rice paddies. A layer of fleecy cumulus clouds protected the P-40s from detection from the south.

Reagan was on the radio, trying to learn what he could from the Kyedaw drome. A squadron of Jap bombers were on the way with fighter protection, according to the warning net.

The first group of Japanese bombers came over the horizon, appeared like fly specks against the blue sky and grew larger. Reagan felt no particular excitement. It had been like this from the start. Without Crash Walton at his right, Reagan felt alone. There were half a dozen planes with him and as many with Wallace, out over the sea.

The Japs kept coming. They seemed to spread out over the water until from that one pin point, hundreds of them swept in vast array toward the doomed city.

Reagan waited until the first sweep of fighters had gone under. Then, with three dozen great Nakajima bombers spread out beneath him, he dipped his wings.

"Pick your baby," he shouted, "and go in there fighting."

He tipped the P-40 down into a steep dive and let loose. Out of the corner of his eye, he saw the others peel off and follow. Directly ahead, where its nose would meet his own, Reagan saw a bomber sailing along as though nothing had happened. The Jap heavy's didn't falter from their course under any circumstance. They had a load of bombs to be delivered and they never lost sight of their goal.

The P-40 was prowling down at 600 m.p.h. Reagan pressed the button. The bomber faltered in the air, rolled lazily on its side and started to fall.

Then he was high again, way upstairs over the mess. The bombers kept coming, and toward Rangoon the earth was heaving upward under the impact of their loads.

Reagan took a quick look at the scene under him. Three or four bombers were going down in flames. Every Tiger had a half dozen speedy little Japs on his tail. Reagan picked out a likely setup, peeled over again and went down with his guns blazing. He was fighting like a wild man now. Two Jap fighters literally went into pieces under his guns. A third one darted away as he was about to open up and hightailed it to the west.

Reagan swore and went after it. He flew for several minutes, but the Jap was still a mile ahead.

This was no good.

THE Nakajima had a good start and as fast as his plane was, he couldn't catch it. Reagan banked, started back for the battle and realized suddenly

* Feb. 20 was the E Day for Rangoon. Everyone who drove a car was permitted to take a car or jeep north to La-hio and turn it in at that point. Military materials were burned. The docks destroyed too. Murder and pillaging made Rangoon a burning hell. The railroad to Toungee was cut off by the Japs. Load-haul trucks tried to rush through at the last minute with vital goods for China. Refugees clambered on every truck. On Feb. 21, the Tigers flew out and intercepted a large squadron of Japs. On Feb. 23 (the last day Reagan spent in the air over the city), the fighting was about over, and on the following, the Tigers got word to "conserve material and personnel. Retire from Rangoon at the last moment."—Ed.

that he had come a long way. The engine started to sputter loudly. He looked quickly at the gas. Nearly gone.

Over the side of the plane was nothing but jungle. Jungle, and far to the east, a tiny sliver of water.

Had he come all the way to the Salween?

He switched on the radio feverishly, at the same time trying to nurse more distance out of the plane.

"Kyedaw," he said. "Captain Reagan calling Kyedaw."

He wondered if the Chinese radio man had already pulled out for Lashio.

"Reagan calling—Captain Reagan calling Kyedaw . . ."

"This is Kyedaw . . . What is it, Captain Reagan?"

Reagan grinned. God bless the Chinese. They had guts. The boy must be standing by in the hell of the attack.

"Hello—hello—" The engine was silent. He was losing altitude fast. "Listen—tell Williams I got off the course. I'm somewhere near the Salween—about due west of Pegu."

A hesitation, and then the radio spluttered again.

"Williams is here. He says it's free beer* for you now."

Reagan shouted hoarsely.

"No, you damned fool. You didn't get me. *I'm out of gas.* I'm going to hit the silk west of Pegu on the Salween."

Reagan was already down to ten thousand feet, trying to get as close to the Salween as he could.

Williams' voice came in now.

"Reagan—Reagan?"

"I'm hailing out," Reagan shouted.

"Yes, I know. We'll get someone out there to look for you. Listen—the Rangoon plane went down somewhere

near where you are. A Jap plane crashed it into the Salween Valley. Miss Walker sent a message just before they crashed."

Reagan felt cold sweat ooze out of his forehead.

"Go on," he said hoarsely. "Keep talking."

"She said, 'guard the huddha with your life. Our future will depend on it.'"

Reagan thought of the safe in the main office. He wondered dully if it had gone up to Kunming on the trucks.

The radio was dead.

Ripping his safety belt away, he pushed the glass cowl back and stood up. The wind cut his face. The solid green of the jungle was closer.

He took another look at the Salween, tried to chart its course in his mind and jumped. The parachute jerked him back rudely and he felt a sudden relief as it spread out in a protecting mushroom over his head.

REAGAN awakened with a dull ache in his right shoulder. He was lying in wet, sharp swamp grass that swept up three feet above his body. The parachute had lodged in a tree and sent him hurtling through the branches to the ground. He remembered the sudden violent pain as he hit the ground on his side.

He sat up slowly, felt of the arm and decided it was only bruised. Slipping out of the harness, Reagan looked around him, trying to take stock of the situation. He had fallen into a small opening in the thick jungle. Judging from the soft ground under his feet, he was fairly sure that the wind had carried him into the river-bottom country of the Salween.

Unfortunately, his problem was not simple. The Salween had roared and torn itself into a series of the deepest,

* Free beer—the Flying Tiger radio code signal, meaning "return to drome."—Ed.

wildest canyons in the world. The nearest town, probably Pegu or Prome, would be an impossible journey to the east through uninhabited jungle. He might, with luck, struggle through to the mouth of the Salween at Moulmein. The chances were a hundred to one against it.

Checking his direction carefully, Reagan started toward the Salween. The shoulder was bothering him badly, but with a full holster of ammunition he felt better. The sun started to sink, turned to a brilliant red ball and dipped into the jungle.

As the last color touched the western sky, he came out on the low, muddy bank of the river. He found a small meadow where he could start a fire and stand guard from night creatures. The river supplied water, muddy and terrible to drink, but a life saver after the miles of jungle.

In the darkness, he built a huge fire and sat close to it, wondering if Williams would be able to find him.

Frances Walker and Wong were, if they had been lucky, stranded in just such a spot as he. Walton, also, had gone down near here.

Crash Walton had deliberately chased a Japanese plane into the Salween country and been forced down. The big airline plane, Williams said, had crashed because of a Jap attack.

Reagan remembered too clearly now that he himself had pursued a Jap into the valley.

Yet there wasn't a Jap fighter to his knowledge that would outfly the P-40 on the straightaway.

The fire was crackling cheerfully now. Reagan tried once more to unravel the mystery of the strangled buddha. Wong, sincere and straightforward now that his confidence had been won, was, Reagan decided, an honest man. The methods he had used were

unorthodox, but when fighting a common enemy, how else could Wong have handled the situation he found himself in?

That left Baumo Gali.

Wong had said that Gali had a Japanese look about him. Gali had been desperate in Rangoon. He had spared no effort to murder those who possessed the buddha. Yet his methods were not the methods of the thugees.

Had Gali known a new buddha had been substituted for the old?

Reagan stood up, went as far as he dared and brought more fuel. The blaze was a good one, leaping up against the velvet night. He found a log, placed it close to the flames and lay down with his back to it. The heat warmed him and gradually the pain in his shoulder diminished. At last he slept.

TO BOB REAGAN, his awakening could never be one that could be classified clearly. He remembered the almost satanic faces that leaned over him near the dying fire. He remembered jumping to his feet, the sudden attack from the rear, a blind, stabbing pain as though his arm were being torn off, and again—blackness.

The second awakening was hardly less painful. At first he had no idea what caused his body to toss about. Then his eyes opened narrowly, and he knew he was on a rough stretcher carried by two of the dirtiest human beings he had ever seen. He tried to lie still, afraid that if he gave signs of recovering, he might be forced to walk with the rest of them.

His aching, exhausted body rebelled at the thought of keeping pace with these swiftly moving barbarians.

More confident of himself, he felt for his gun and found that it had been taken from him. The belt of cartridges was

still about his waist.

The stretcher assumed a sharp downward angle, and he knew they were descending still deeper into the valley. Occasionally shadowy figures came close to him, guttural words were exchanged and faces leaned close to his. When this happened, Reagan closed his eyes tightly and tried to breathe the even, still breath of deep sleep.

Then the men grew more excited and moved at a faster rate. Harsh, unintelligible commands were shouted. Chancing a quick look, Reagan saw that they had reached a low place near the river. Gaunt, black cliffs rose on both sides and the roaring of the salween grew loud in his ears. Then the moon was blotted out and their journey was at an end.

With rough, strong hands they took him from the stretcher and carried him through a dark, brush-covered hole into the mountain. Then he was dropped rudely on a sandy floor and he lay still as the footsteps departed.

After the men were gone, he opened his eyes, and found that the cave in which he had been thrown was a prison. The opening through which they had come was closed by a slab of granite.

Why he was here and what purpose he would serve, Reagan admitted his failure to fathom. He only knew that he was a prisoner of an unfriendly tribe of jungle people.

Reagan felt better in spite of the pain in his arm and shoulders. The cave was clean. Its roof was perhaps ten feet above his head. A single torch lighted its depths and revealed that the floor was white sand. No bench or table suggested previous occupancy, yet he had the feeling that this was not the first time men had been imprisoned here. His captors had known the way so well, and placed the granite door in place

with an ease that suggested long practice.

HE COVERED every inch of the place, looking for a possible opening. There was fresh air, but Reagan held no story book illusions of escape. The air came down in a slight, cool draft from above, probably through an opening made for the purpose.

His gaze roamed the floor and stopped suddenly on a slight imprint near the back wall of the cave. He crossed the floor and kneeled. The print was clear and fresh, undoubtedly made by a woman's high-heeled slipper.

Frances Walker?

Why her name came to his lips so easily, Reagan could not guess. Perhaps his own eagerness to believe she was still alive? Perhaps by that strange faculty men have to understand when they are close to death.

It was crazy—impossible, and yet she had crashed near here.

But why a *single* print?

The sand was smooth. All traces of previous habitation were cleanly erased and yet he was sure others had come before him.

Then, if this one print had been overlooked, perhaps they had forgotten something else—some sign that would encourage . . .

Eagerly he covered the cave on his hands and knees. He scooped the sand with his fingers, wondering if by sifting it out, something might be uncovered. His fingers halted in their search and he drew a small fragment of cloth from the sand.

It was a square of the same green wool that Frances Walker had worn that first night on the *Holland Maid*, and afterward when he had seen her in Rangoon.

The cloth was shredded at the edges where thread had been pulled from its

seams. It was the small, decorative pocket to the jacket of her suit.

HOURS later several guards came. They jerked Reagan forward roughly, and led him from the cave. They took him to a small hut near the jungle edge. Its one room was small, and it held only a table and one chair. A man occupied that chair, a pistol carefully placed on the table before him. The guards shoved Reagan forward roughly and left him alone to face the man behind the table.

Reagan waited, his face expressionless.

"My friends," the man opened his lips in a toothy, gloating smile, "they are rough?"

Recognition flooded Reagan's features. Baumo Gali! Here was the first straw he had been able to grasp.

"I'll be damned," he said. "If it isn't the woman killer from the *Holland Maid*."

The speech did not please the man who sat behind the desk. His fingers closed over the barrel of the gun and his eyes turned flint hard.

"It will be well to remember that I talk here," he said. "Your life is worth little."

Reagan smiled. That speech, he knew was a lie. If Baumo Gali had engineered this series of accidents, he must value Reagan highly. He thought of the stone buddha he had left in the safe at Toungoo.

"I think my life," he answered evenly, "at least for the present, is a long way from being valueless."

Gali's face clouded slightly.

"If I understand Americans, Mr. Reagan, you would do a lot to save your skin?"

"I'd do a hell of a lot more to save the lives of my friends," Reagan answered.

"You were not called here for debate," the little man said. "I am forced to ask for your assistance."

Reagan grinned suddenly.

"You want my help?" he asked. "Haven't you got your signals mixed a little?"

Gali stood up. The revolver on the table was a common denominator for Reagan's greater strength.

"I said before, that debate wasn't my purpose for bringing you here!" Gali said. "I took great trouble to disguise a very fast plane as a Nakajima fighter. Working at a distance I managed to attract you and lead you here to the Salween."

"But—to remain on a straight path, I am having some difficulty in obtaining a certain stone buddha which was turned over to Miss Frances Walker on board the ship *Holland Maid*. Its possession seems to have narrowed down to you."

"And where did you get that information?" Reagan asked.

Gali waved an impatient hand.

"I know that at present the buddha is in the hands of Channing Walker at Kunming."

"Then you know more than I do," Reagan shot back. "I didn't . . ."

HE REALIZED then that he had been neatly and speedily trapped. Gali smiled, this time in triumph.

"Then Miss Walker was correct," he said. "She told us that the buddha was in your possession. I assumed that you would send it to Kunming with your luggage."

"So what?" Reagan snapped.

"So I propose that you write a note that will be delivered to Kunming, asking that the buddha be turned over to the bearer of the message."

"And if I refuse?"

Gali's expression was unchanged.

"Have you ever heard of the thug-gee? They are a Hindu clan who worship the Goddess of Destruction, Kali. They kill by strangling their victims with a knotted rope." He paused dramatically. "This village is the home of thugs who left the Rangoon area because of the Japanese invasion. They are ready to kill when I point my finger at the victim."

Reagan was silent.

"I might also mention that Miss Walker would suffer that fate, should you refuse to write that note."

"I don't believe Frances Walker is within a hundred miles of here," Reagan said. "How do I know you aren't lying?"

Baumo Gali's eyes grew sharper.

"You aren't dealing with a fool, Reagan," he snapped. "The Japanese government wants that buddha. I was sent with a member of my staff to America to obtain it. Fortunately, Wong sought a like fetish and I learned of his quest. It was convenient to substitute the buddhas, a rather clever substitution made when Miss Walker left her stateroom. Now do you believe I know what I'm talking about?"

"You attempted to shoot Miss Walker," Reagan said.

Gali shrugged.

"It would have made the substitution a simpler matter. Her death would not have stopped the buddha from reaching Rangoon."

"I'm beginning to understand," Reagan said slowly. "She tried to get rid of what she thought was the first huddha by tossing it overboard."

"A point which troubled us at the time," Gali admitted. "In an attempt to save the buddha we had substituted, my assistant died. It was a necessary sacrifice."

"Sacrifice," Reagan snapped. "Bushido—Japanese code of honor. You've

stabbed in the back in the name of that code. It won't win a war for you."

GALI picked up Reagan's revolver. "We have wasted enough time," he said. "You will write that note, now."

Reagan knew that the man would not hesitate to shoot him down if he refused. There was a chance that getting Gali out of the way for a while might give him a chance . . . *Chance?*

That was it. Gali had taken paper and a small pencil from the desk drawer. He put it before him on the rough surface.

"Write."

With his tongue in his cheek, Reagan wrote. Gali was in a tight spot. This was his last card. Without help from Reagan, he had no chance now to get the huddha.

Reagan scribbled slowly, pretending that the task was difficult for him. His fingers were awkward on the pencil and once or twice he blurred the words so badly that he had to cross them out and make substitutions. At last he handed the paper back to Gali.

"I guess that will do it," he said.

Gali took the message eagerly and read it:

*Gali fighting against Japanese.
Do not follow but give him the
safe in truck with force during
Rangoon attack. In this village
they promise our safety and lives.
We are in no great danger.*

The wording was stilted and awkward. Gali, unfamiliar with American writing, didn't seem to notice it for a moment. Then he slapped the paper back on the desk before Reagan.

"You thought you were very clever, didn't you, Mr. Reagan?"

Reagan's heart sank, but he managed to express surprise.

"But—you asked . . . ?"

"What good is that paper without your name signed to it?" Gali snapped. "Your signature—at once!"

Reagan signed his name slowly.

"Now—turn about and walk straight from the hut. Do not turn."

Reagon turned, waiting for the slug from the gun to rip into his back. He took one hesitant step, felt the barrel of the weapon crash down on his head and pitched forward into darkness.

DEEP under the towering cliffs of the Salween a great cavern extended. Lower than the bed of the river, the gigantic chamber stretched, down into the mountain, the temple of the Goddess, Kali. At first it was a tunnel, worn by water in ages past, meandering into the granite. Then it widened into a great opening with a roof so high that eyes accustomed to the yellow of torchlight could not see the top. Here, in a vast echoing underworld the thuggees gathered every eighth day to worship the goddess of destruction.

Now the sound of their voices in the chamber was louder and eager. Filled with a fierce, exultant note of happiness.

The Goddess Kali had returned.

At the far end of the cavern, a niche, perhaps six feet square had been cut from the stone. In this opening was a flat rock that extended into the main chamber and back to the dead end of the cavern's inner wall. Kali, her wild, passionate stone body nude in the flickering light, stood on that rock throne. She was symbolic of the lust and desire to kill that made men strangle their enemies and throw their bodies before her in stark happiness at fulfilling their trust.

Kali, years before Christians strode the earth, had possessed men's souls and made them kill to satisfy her love of destruction. Kali, her hands clasped before her, leaned forward as though

eager to inspect each bloody victim tossed on the floor at her feet.

Her body was flawless and hard as the stone under her bare feet. Her hair fell about a gray, shapely face, waxen in its stillness. Deep, slanted eyes looked downward sightlessly and the mouth of rock was molded into an expression that was never appeased, regardless of the blood that flowed before her.

Kali demanded her victim on the eighth day.

He was coming, even now, dragged by the neck where the noose was fitted tightly. He came unwillingly, frightened at what he knew would happen in the midst of the torch bearing, screaming men.

Crash Walton knew he was walking the last mile.

He admitted to himself that he had it coming. He had had no right flying off by himself that last afternoon at Rangoon. Deep in the canyons of the Salween, Walton had realized the fool he had been. He had tried to turn back, but the powerful plane swooped down upon him and tracer bullets poured into his engine.

After that came the dizzy dive downward, the slow fall of the parachute, the capture by Baumo Gali's men. It had all been like a newsreel; quick flashes of incidents that ended when he was tossed hurriedly into a stone prison and left for the sacrifice to Kali.

Walton knew he would die, but he didn't know why. When he saw the shouting madmen gather around their idol, he remembered the story of Kali and the whole thing was clear to him.

He didn't want to die. The rope, already cutting into the flesh of his neck, was more than he could bear. Big men don't die gracefully. They take more punishment than others might. Walton pictured his heavy body threshing about

at the end of the rope and wondered if he would cry out. Damned if he'd let the devils know how badly it hurt.

There must be a hundred of them, all dancing about like dervishes and falling before the stone statue.

He laughed suddenly, realizing that his thoughts classified the stone girl as though he had just met her walking down main street.

"Nice figure," he whispered to himself. "Nice looking babe."

Then emotions burst over him and brought cold sweat to his face. He was going crazy . . . !

WONG, Chinese agent, had failed in his mission. He sat alone in a cave prison not unlike the one Reagan had occupied. Wong was a philosopher. If he alone were to die, it would not be bad. After all, he was a husk of a man, old and dried by the hot sun and fine dust of China. He had gone to America to make final arrangements for the Flying Tigers. The Chinese government had learned of certain enemy plans to smuggle a valuable buddha to Rangoon, through China and into the land of the Nippon.

Wong had combined his missions well, but his mistake had been as easily made as it was foolish. Wong could condone an error, but an error such as his, never.

He sat on the sand floor of the cave, his long fingers tracing the symbol of the dragon on the sandy floor.

At first he had been suspicious of the boy, Bob Reagan. Reagan's father had been a trader. He had worked with the Japanese years before the war broke out. Young Reagan had purchased a certain buddha from him, Wong, and that first aroused Wong's wonder.

When he found Baumo Gali was in San Francisco at the same time Reagan planned to sail, he linked them together.

Wong wanted the buddha and he had taken it. Only once had he made a mistake and that was his downfall. He had fought for and taken a harmless fetish and completely overlooked the statue that Baumo Gali had smuggled on board the *Holland Maid*.

Now he knew his mistake. He had, in a measure, saved face for Reagan by trusting Baumo Gali's buddha to the boy when he learned of Reagan's innocence. Now his own death would involve the murder of others. The girl, Frances Walker, had already been dragged from her cell. The pilot, Crash Walton, was dying now. He, Wong, honorable damned fool, would soon follow.

He heard a plane take off, and knew that Baumo Gali was once more away on his quest for the buddha. Wong wondered where Reagan was, and if the buddha that meant so much to Japan was still well hidden.

Regardless of situations that would arise, he was powerless to save himself.

But he would not die before the heathen goddess, Kali!

It was a gentleman's privilege to die at his own hand. Should the occasion arise, Wong had enough poison pressed into wax under his long nails to kill a dozen men. It was the custom of men who lead dangerous lives to leave an easy and honorable way out.

Wong smiled and the wrinkled skin of his face was suddenly alive with sardonic humor at his own dreaming.

Tap-tap.

The sound, a faint tapping on the rock, came from near him.

He smiled at the thought of a dispirited old man, dying by the simple expedient of sucking his fingers. It was fitting that he should employ a childhood act to return to the womb of his mother earth.

Tap-tap-tap.

He could die easily . . .

The tapping was a signal! A clear, sharp signal on the rock that guarded his cell!

SWIFTLY Wong arose and went to the rock.

Tap-tap-tap-tap.

First to—then three and now four. That could not be coincidence. Someone was trying to signal from outside. He pressed his ear close to the rock and listened.

It came again, this time five distinct knocking sounds. He returned them eagerly. There was someone—a friend, who would know who was inside. The rock started to move slowly. Wong was surprised. There must be levers outside. He had tried to push the stone and failed to move it an inch.

There as an opening of a few inches.

"It's Reagan," the voice was low, eager, "who's in there?"

Wong leaned close to the door.

"Wong. Open quickly."

He heard Reagan's breath come hard as the rock slipped away and daylight flashed into the cell.

"The village is deserted," Reagan grasped his arm and drew him into the light. "Quick, across the compound."

Wong stumhled. His old bones were weak with imprisonment. Reagan helped him toward the village.

They found the one-room shack and Wong knew it was here he had stood across the table from Baumo Gali and heard his death sentence.

Reagan closed the door. He shook Wong's hand warmly.

"Miss Walker—Frances, is she all right?"

Events were far ahead of Wong. He tried desperately to collect his wits.

"I am afraid both Miss Walker and the pilot, Crash Walton, are dead," he said sadly. "Baumo Gali captured us

all. We were questioned about the huddha. When Gali was convinced that it was in your possession, he turned us all over to the men who inhabit this place. The girl was taken away by Gali himself a fortnight ago. I have not seen her since."

Reagan scowled.

"Gali is on his way to Kunming for the idol," he said quickly. "I have reason to believe that help may be coming for us. What did they do with Crash?"

Wong nodded.

"They took him from the cell an hour ago," he said. "He is going to be sacrificed to Kali, goddess of the Thuggee. They were to return for me in eight days. I have had little to eat. I am afraid I cannot help you much. How did you come here?"

"**G**ALI tricked me," Reagan said. "He has a fast, camouflaged plane. I thought I could overtake him and knock him down. After I chased him to the Salween, I had to hail out."

Wong nodded.

"Gali is clever," he admitted. "I owe you an apology. I knew Gali was to smuggle a huddha from America. He was smart enough to make me suspect you and the buddha you owned. I thought you were a spy in his employ. After you saved Miss Walker's life, I knew you were honest. It was too late to keep you from becoming involved."

"I know," Reagan answered impatiently. "Gali told me the whole story. He cracked me on the head and left me for dead. The men here have all cleared out. When I came to, I found a gun in his desk. I wondered if others were imprisoned as I was, in the caves at the base of the cliff. I found you there."

"Wait," Wong's eyes were suddenly bright, "you say all the thugs are gone

from the village?"

Reagan nodded.

"Then," Wong continued eagerly, "that explains the noise outside my cell. It was very faint, but I thought I heard many men shouting in a distance."

"The cave," Reagan threw open the door, "it may go deeper into the mountain than we think."

Gun in hand, he ran toward the small tunnel. Wong tried to keep up, but found it was impossible. He sank down, exhausted, near the cave entrance.

Reagan went ahead more cautiously once he was in the dark passage. The cells where they had been held were near the opening to the village. Reagan found the tunnel, passed the cells and went into the cliff. The tunnel was narrow at first, and then wider. It went down at a sharp angle and warm, fetid air drifted up from below. Pistol in hand, he moved swiftly.

The scene that met his eyes in the cavern was horrible. The cavern opened from the tunnel, and on the far side was a large group of the thugs from the village above. They sat on a semi-circle before a small, torchlighted niche in the wall.

Reagan's eyes lighted eagerly at the first sight of the nude priestess Kali.

For that instant he thought . . .

But, no! The woman was made of cold, gray stone.

STRAPPED across the flat granite rock before her was the stout body of Crash Walton. Reagan drew into the shadows at the edge of the cavern. Three men stood over Walton. Silence greeted them. The final act of sacrifice was about to occur.

A rope had been drawn tightly around Walton's neck. Reagan detected movement in his body and sighed with relief. At least Walton was still

alive. One of the men who stood over Walton drew the rope tight and placed his foot against Walton's face.

Reagan thought little of the chance he was taking. The strangler was a perfect target. Reagan aimed carefully and sent a bullet whining across the cavern into the man's head.

With a scream of pain, the thuggee fell forward across Walton. The pilot tried to struggle loose from his bonds. A cry of anger went up from the mob. They had waited to see the sacrifice to Kali. Instead, their own leader had fallen.

Reagan ran into the mob, firing wildly and trying to make as much noise as he could. They saw the man with the pistol and swept across the sand to meet him. Reagan fired his last shot, threw the gun at the first man and sent him down. He waded in like a crazy man, the odds overwhelming him in a wave of fanatical attackers. He went down, clawing and biting, still trying to reach Walton.

A rope was around Reagan's neck. It nearly pulled his right ear off, tightening cruelly as he fought. The cave swirled around in his eyes and bright stars seemed to fall at him from the blackness.

With his senses failing him, he felt the entire cavern shake suddenly with a loud explosion.

B-o-o-o-m

The shock silenced the throng. The sound vibrated and echoed down the tunnel. The place was in a turmoil. Screams of terror arose and Reagan felt the rope loosen as they dropped him and started to run up the tunnel.

Bo-o-o-m Bo-o-o-m

Reagan sat up weakly. He knew that sound. The message had worked. Channing Walker's boys were sending heavy bombs crashing into the thuggee village. They looked around quickly.

The thugs were gone. A dozen heavy rocks crashed down from the ceiling of the cavern. Walker was doing his job well.

The heavy crash of the bombs came again and far away Reagan heard the sudden sound of P-40s as they dived. Then the rat-tat-tat of the machine guns. Another boulder came down, rocking the floor under him. Reagan struggled across the floor on his hands and knees. Walton, bound and gagged, stared at him gratefully.

Reagan managed to stand up. He worked feverishly at Walton's bonds. The gag came free.

"Thanks, fella," Walton said weakly. "Better get out of here. Looks like Kali's temple is gonna do a crash dive."

Arm in arm, they went toward the tunnel.

Bo-o-o-o-m!

The whole cavern shook under the blow. Something fell with a thud behind Reagan. He turned.

"Good Lord!"

Crash's eyes followed Reagan's.

"Frances Walker!"

Kali, Goddess of destruction had fallen forward into the sand. Near her body lay a cruel wax mask. With the falling of the mask, the cruel slanted eyes, the hard mouth was gone. Instead, staring at them sightlessly was the stone-like face of Channing Walker's daughter.

REAGAN covered the distance between him and the stone girl swiftly. Seeing her here, turned to a merciless stone, was the hardest thing that he ever faced. Picking the girl up, he was surprised that instead of stone, her body was light and hard, as though a crust were formed over it. Together he and Crash carried the girl into the tunnel. They put the pitiful body on the sand and Reagan went to his knees

at her side. He wanted to cry, to let go the emotions that had driven him so nearly mad in the hours it had taken to bring them together.

Suddenly, as though away from the spell of the cavern, the skin of Frances Walker's body started to soften. He was sure that the pressure of his hand against her arm pushed the flesh inward. Unable to speed the process, Reagan was very still, wondering if the girl would live again. Crash, looking over Reagan's shoulder, allowed his breath to suck in swiftly, almost frightened by the change taking place.

Frances was alive. Slowly her fingers flexed. Her cheeks came alive with the warmth of blood in them.

Unable to explain the transition, Reagan was silent, thankful. She suddered then, the slight, fearful motion shaking her body from head to foot. The flesh was changing from stone gray to a living quivering ivory.

"Thank God!" Reagan breathed the words slowly.

Her eyes opened as though hearing his voice and she looked up at him.

"Bob—it's really you?"

Cradling her head in his arm, he pressed his lips feverishly to her own.

"It's me," he choked, and more words than that refused to come.

THE sight that met their eyes as they left the tunnel and came into the sunlight, was wonderful.

Five P-40's had landed and were drawn up in line near the village. The ground was covered with bodies of the thugs.

On the ground near the shack where Gali had lived Reagan saw Gali himself, firmly trussed in heavy ropes. Commander Channing Walker and Frank Pastur of the Second Squadron, were there. Reagan carried the girl to them.

Channing Walker saw his daughter

and a cry of anger escaped his tight lips.

"What have they done to her?"

Reagan shook his head.

"I don't know," he admitted. He twisted savagely on Baumo Gali. "You know what happened."

Baumo Gali had lost. He knew now why they had delayed so long when he walked into Kunming to get the buddha. Someone followed him back to his plane hidden on the jungle field. Reagan, "that I can explain." Wong, safe. They had wiped out the thuggee village and captured him.

"I think," a quiet voice said behind Reagan, "that I can explain." Wong, unable to help in the battle had waited in the tunnel.

He turned to Reagan:

"There is a legend that whoever stands in the niche of the Goddess Kali, shall turn to stone," he said. "Some say the cavern lies within a circle of power that comes from the underworld. Others believe in the superstition that Kali herself lies in wait to destroy and turn to rock anyone who dares take her throne. I should have guessed what happened. These thugs have had no goddess for centuries. Gali evidently gained his power by placing the mask on Frances Walker's face and placing her in the niche where the transformation took place."

Reagan had wrapped his jacket about Frances Walker's body. He held her firmly about the shoulders now.

Wong put a kindly hand on the girl's arm.

"I am glad that they spared your life," he said simply.

Frances took his hand in her own.

"It wasn't your fault," she said, "they put me in that awful place. I couldn't move. There was a mask on my face. I knew what was happening but I couldn't move."

Tears welled into her eyes.

"You are safe now," Wong said. "And the spell of Kali, will never touch you again."

"YOU have the buddha?" Wong asked.

Walker motioned to one of the pilots and the buddha was brought from his plane.

Wong took it in his hands, and turned to Crash. A grim expression touched the old man's lips.

"I believe rough treatment may bring the secret of the buddha from Gali's unwilling lips," he said softly.

Crash used his foot willingly, and Gali rolled in agony on the sand. Wong knelt near the Jap.

"It might be well to explain, *Tonjo Ferano*, that I knew your real mission in America. I know that you took advantage of my ignorance and substituted this buddha for the harmless one that Miss Walker brought to Rangoon. I know that when she tried to toss it overboard, one of your spies lost his life to save it. Japan is not pleased when her sons fail on their missions. You will be thrown into a Chinese jail and rot there unless you tell us what value this statue holds."

The mention of jail and disgrace brought a pleading, childish look into *Tonjo Ferano's* eyes.

"By the power of Bushido my crime could be erased," he said pleadingly. "If I were to confess . . . ?"

Wong nodded.

"You will be given the chance," he said tonelessly.

Tonjo Ferano's face lightened.

"A son of Nippon has collected data showing every army camp and gun emplacement on the west coast of the United States," he said hurriedly. "Our camera work prior to the outbreak of war could not contain this vital infor-

mation. A map is traced on a smooth slab of clay, and hidden in the hollow chest of the buddha."

Ferano's head fell forward against his chest and his voice sank low.

"Now I will have my opportunity?"

Wong nodded.

"You will go alone into the cavern of Kali and we will not enter for a period of five minutes."

He started methodically to free the ropes that held the Japanese spy.

THE cool, screened porch of Channing Walker's home in Kunming was serving its purpose well. Crash Walton, Reagan, with Frances sitting close to him on the bamboo swing, and Walker himself made up the small party. Wong arrived from the communication office at dusk. He sat quietly near Channing Walker.

A long interval of silence followed Wong's arrival. None of them felt like reliving the past several days.

Tall wine glasses were passed and at last Walton, usually the one to break the silence, spoke:

"What I'd like to know," he demanded of Reagan, "is how did you get word to Commander Walker?"

Reagan looked at Frances' father.

"You can tell him better than I can, sir."

Walker smiled.

"I thought it was funny that a college

graduate would write such terrible English," he confessed. "Pastur is somewhat of a code expert. It took him just five minutes to find out that by skipping every two words after the first one in Reagan's message, he could get an entirely different and obvious meaning from the note. After that, we did the rest."

He took a crumpled slip from his pocket and passed it to Crash. The code words were underlined.

Gali fighting against Japanese.

Do not follow but give him the safe in truck with force during Rangoon attack. In this village they promise our safety and lives. We are in no great danger.

Bob Reagan

"Nice going," Walton said with a grin. "Say, what was that business about *Bushido* that Gali, I mean Ferano pulled on you, Wong?"

"The Japanese have a code of honor called *Bushido*," Wong answered. "To save face, Ferano wished to kill himself with his own samurai sword. The Japanese have many queer ways of saving their honor."

Reagan drew his arm tightly around Frances Walker's waist.

"It's all been a pleasure," he said. "Now that the stone goddess of Yunan has once more returned to her own loveable flesh."



THE SPIDER ICEBOX



HAVE you ever wondered how certain insects preserve their food—as their food is as easily attacked by bacteria as ours is. Spiders and some wasps solve this problem in a unique manner. They do not kill their future food, for to kill them only exposes their bodies to the degenerating saprophytic. Instead madame spider eats what she can at her meal and paralyzes the rest of her food for future meals.

A spider is capable of injecting a paralyzing fluid into its prey. The living, yet inanimate victims are kept alive in a state of unconsciousness until

a time when needed as food.

In case of the wasp, its prey is kept in the same cells with the wasp's eggs—where they remain until the wasp's eggs hatch into larvae. The larvae now turn upon the stupefied, still living food and consume them.

While the spider will preserve flies and other small insects, with its paralyzing fluid, the spider itself is not immune to this same treatment at the hands of the wasp. The paralyzing fluid of the wasp will put the spider into an unconscious state and give to her the same medicine she feeds the fly.

THE SPIRIT

BY LEROY YERXA

OBERLEUTNANT Karl Mueller turned in his seat and faced the row of soldiers behind him in the glider. The *Oberleutnant* was grim and unsmiling.

"We are over Cairo at ten thousand feet," he snapped. "Before the moment comes, it is necessary for you all to understand the plan. Are there questions?"

Not one of the thirty Nazis spoke. The night was cloudy and only a faint suggestion of moonlight reflected through the windows, on the pale faces of the group.

"The *Kommandant* issued full instructions before we were released from our tow plane," Mueller went on. "The

British have a large oil installation near here. My map shows the exact location. You have been equipped with incendiary bombs that will explode when the pins are removed. At my command you will jump with black parachutes and gather in a single group below. We will make the attack as soon as I reach the ground. That is clear?"

A low murmur of assent came. After that, only the faint hiss of the wind sounded against the sides of the motorless bird. There was occasional clearing of throats, as though the men were suppressing words that should not be spoken.

"You understand that we will land



This was no nightmare born of dried blood. This was the Sphinx of Egypt come to life again!

OF EGYPT



A great surprise awaited Oberleutnant Kari Mueller in the deserts of Egypt. If he had known—but he didn't, so he attacked!

in the center of the enemy stronghold? That our one task is to destroy that fuel and hold the enemy here without replacements as long as possible?"

The questions demanded no answer.

The glider pilot leaned forward and whispered to the *Oberleutnant*. Karl Mueller nodded and stood up. Without a word, the men did likewise.

"We are on an important mission." Mueller's lips were bloodless. They pressed into a hard, straight line between each sentence. "Our method of escape is already gone. Prepare to jump."

The men shuffled forward toward the emergency door. Their right hands clutched tightly at the chute-rings. They looked like poorly stuffed dummies, shuffling toward the empty sky with no feeling, no emotion. The first man reached the door. Karl Mueller pushed it open. There was yet a moment to spare. The *Oberleutnant* stiffened, his heels clicking smartly, arm raised in a salute.

"Heil Hitler."

The men seemed startled, as though rudely awakened from a dream. They went through the same motion mechanically and without enthusiasm.

"Heil Hitler."

There was something pitiful about the returned salute.

The first man was facing the open door. Here was endless void, waiting to snatch at him with cold, cruel fingers. Perhaps, he thought dully, the chute would not open. Did it make any great difference?

The pilot was watching his instruments closely.

"Now — *Herr Oberleutnant*." He spoke sharply.

"*Eins*," Mueller shouted and gave the first man a push that sent him spinning into the darkness.

"*Zwei*." The second moved forward

swiftly and went head-first into the air. They came up fast now, suddenly eager to have it over with.

"*Drei*."

Thirty men jumping or being pushed into the thin, cold air above the desert. *Oberleutnant* Mueller was last. He faced the night sky without looking back, and felt the wind tear at his face as he hurtled downward. He sighed with relief as the jerking, swaying motions told him the black chute was open over his head. Mueller was trying hard to retain faith in his Fatherland. It wasn't easy to face death with a smile, now that he was alone above the desert. The suicide assignment had sounded noble when they stood before the *Kommandant* and received the cold hand-clasps of their superior officer.

The ground came up swiftly. Karl Mueller flexed his knees, ready to hit the ground and roll over and over to break the force of the fall. The others were already down and waiting for him somewhere close by.

CORPORAL Johnny Perkins was tight. He was so tight that the ride to the pyramids had been like a good mixing in a cocktail shaker. Johnny had been sent with a small detachment of Yanks, stationed here to help the British guard their precious oil tanks. Tonight he was on leave, and no one, not even the general himself, could forbid Johnny the pleasure of getting drunk.

That was just the point. Johnny had more than he wanted. He had picked up an old Ford in Cairo and set out to see the pyramids by moonlight. By the time he reached them, he had taken care of one pint and started another. He sat for a long time watching the great rock piles. After a while he thought the clouds were standing still and the pyramids were falling on him.

That was plenty for Johnny Perkins. Besides, he was lonely and a little sick. He tossed the empty hottle away, staggered to the Ford and got moving.

Out on the main road, moving slowly toward Cairo, Johnny made the mistake of looking back. He remembered the Sphinx, a gigantic lion sort of thing with a woman's head. Something was spinning madly around inside Johnny's head. He saw the Sphinx stand up slowly and stretch like a cat that has been sitting a long time by the fire. Johnny turned away quickly, blinked and focused his eyes on the road. His foot went to the floor board and the Ford plunged ahead with renewed vigor.

This was worse than pink elephants. Much worse.

Johnny tried not to, but he had to take another look.

"Judas."

The Sphinx was pacing back and forth. Its eyes glittered in the darkness like two headlights.

What the hell did they put in Egyptian whiskey?

The Sphinx was shaking its great head impatiently. Its tail swished behind it as the beast walked stealthily away behind the great pyramid into the desert. The earth was trembling under its tread.

Johnny didn't dare look again. He rode into Cairo with the Ford wide open, and the engine red hot. Under a cold shower at the hotel, Johnny Perkins swore he'd never take another drink from a bottle that did not carry an American label.

OBERLEUTNANT Karl Mueller never accomplished his mission. True enough, his squad wasn't troubled by British sentries. A sand storm

hid them as they approached the high fence. Their wire cutters and explosives were prepared.

They were found by the British patrol early the following morning. All thirty Germans were crushed deep into the sand. It was difficult to determine what they were, their uniforms were so badly impregnated with sand and blood. But the identification tags could be read.

The steel fence was broken and flattened into the ground for a hundred feet in either direction. The British general rather lamely blamed this on the sand storm, even though he knew the story wasn't a likely one.

JOHNNY PERKINS read the account in the Cairo paper. Sober as a lord, Johnny still remembered the Sphinx clearly. He wanted to take his story to the British general, but he knew that Headquarters would not take kindly to such an experience.

Johnny remembered something else that made sense. The oil tanks were located close to the pyramids. Close enough to blow parts of the Sphinx to kingdom-come, if not destroy it completely.

In the afternoon he took the Ford for another pilgrimage into the desert. This time he was cold sober. He circled the great lion with the woman's head, trying to imagine it on the prowl. In the daylight it sure sounded screwy, but then, the old girl had been sitting here for a good many centuries. She had been pretty active once, destroying everything in sight according to legend. Maybe she had a yen for more action.

What else could explain those mangled, crushed bodies? The fence, plowed under by the weight of a gigantic stone paw?

Scientific



THE CHANNEL of the HUDSON RIVER, INSTEAD OF BEING A SLOPING BANK OF SILT, IS A DEEP GORGE OF SOLID ROCK.



GIGANTIC ICEBERGS OFTEN CARRY GREAT GRANITE CRAIGS LOCKED WITHIN THEM AND UPON REACHING WARMER WATER, DEPOSIT THEM ON THE OCEAN FLOOR.



AT PRESENT THE ATLANTIC SHORELINE, EXCEPT IN THE NORTH, IS RECEDING—ON BOTH SIDES NEARLY TWO FEET A CENTURY. WILL THIS CONTINUAL REGRESSION SOMEDAY REVEAL DROWNED CIVILIZATIONS IN MID-ATLANTIC?

Mysteries

DOES THE ATLANTIC HIDE A SUNKEN LAND?

By L. Taylor Hansen

This question has plagued the imaginations of men for many centuries. Is this the true answer to the age-old mystery?

AT THE turn of the century, this question would have been relegated to the subject of philosophy. At that time it had no place in the science of geology because we could not guess the nature of what might lie below the enshrouding waters of the Atlantic. Now, however, due to the researches of better sounding devices, and the labors of such outstanding authorities upon the Atlantic bed, as Hull, Schuchert, DuToit, Spencer, Reid, Deperet; Gutenberg in seismology and Daly in the study of lavas we are able to look upon the ocean with almost, what one might call x-ray eyes. In imagination, let us take a journey across the abyss of the sea.

As we start down under the waves from the shore of say, Manhattan Beach, we are surprised to find that we come to levels which were once former beaches. Both above the present shore and below it are beaches showing the past fluctuations of the sea. However, our first true shock is borne out by the channel of the Hudson River. Instead of being a long sloping fan of silt, such as we would expect to find from centuries and millenniums of discharge, we meet a gorge—a deep and rocky canyon.

The cleft turns and winds toward the southeast, passing around former embankments as it dips into its thirty-eight hundred foot gorge.

At the end of its journey, the river reaches the edge of the giant continental shelf. The continental shelves extend for about one hundred miles out from the present shore-line and then they plunge down great cliffs into the depths. Were these the edges of what was once a giant rift valley? Close to the line of the cliffs of the continental shelf, we find one of the deeps of the ocean. From the shape of these deeps which are as much as one thousand fathoms deeper than the muddy, age-old ooze floor of the ocean, we might liken them to giant lakes. Is that what they once were? We note, as many a geologist has noted, that the old channel of the Hudson carves its way through the continental shelf to a point where it could plunge into this old lake.

Crossing the expanse of this abyss, we once more come to the ooze of the ocean floor. It is rather monotonously flat. Our supposed motorship would roll easily over the undulating ex-

panse with little diversion in scenery. But what is this ahead? Cliffs? Surely we have not reached the other side already? No, we have not. Yet here, rising in front of us, is the continental shelf of a sunken land.

For one thousand fathoms from the flat ocean floor, these cliffs soar upward! Nor is there a break in them. From Arctic to South-Arctic, conforming to the swing of the shelves on either side, this massive "Ridge" runs the length of the Atlantic, dividing it into two giant valleys. In each valley we find the same winding rivers plunging through carved gorges and emptying into closed basins—the six great Atlantic Lakes of a by-gone age.

Can we be certain that these submerged cliffs once supported a "Lost Atlantis"? No. We have no means to study the mountains and the valleys which rest upon that sunken land. Yet we know that it was land because Gutenberg in his studies of seismology has noted that earthquake waves across the Atlantic give the typical patterns that they always give when going through continental rocks. Furthermore Daly, in studying the lavas upon the existing Atlantic islands found "granitic bombs" or bits of granite (a continental rock) among the old magmas. He immediately concluded that these must have been torn from the ancient base upon which the volcanoes rested.

It is equally true that many large pieces of granite have been dredged from the "Mid-Atlantic Ridge" but the most obvious answer in this case is that icebergs often carry great rocks locked within them, and upon reaching warmer water, drop them.

However, there is one dredge-load hauled up by the "Challenger" which is rather hard to explain. That was a number of burnt or kiln-dried bricks! In the log of the trip, no further mention is made of this find, and it is to be presumed that, under the supposition that a boat-load of bricks was sunk upon this spot, they were tossed back! However, one must presume to question this theory, as modern as the process of brick-making seemed to be, by asking what a ship was doing carrying bricks. Especially across the Atlantic. One might suppose that a brick-factory could be set up at almost any location.

ON THE other side of this sunken shelf, which is from one thousand to fifteen hundred fathoms deep at present, but whose loftiest peaks break the surface, is another valley. Both of these valleys are about the same width, namely about five hundred miles, though, in depth, that on the western side has a slight advantage. Beyond the eastern valley, with its two deeps, is the European shelf. Here again, we find the rivers have cut their courses through the shelf to the depth of seven or eight thousand feet.

Furthermore, it is interesting to know that the Adour River which once tumbled down a textured and twisted course to the upper tip of the North-East Basin, had tributary streams, and when a dredge was able to tear rocks from its carved gorge, those rocks were found to contain Tertiary fossils! This means that the rocks were cut through and polished by the river in sub-aerial action after the end of the Tertiary Period.

Now it is perfectly evident that if the sea-level in the Atlantic was lowered seven thousand feet, and that is the correct conservative figure given to Dr Avebury by Hull, then most of the Mid-Atlantic Ridge would arise as dry land.

However, this does not mean that the entire area was dry during the Time of Man. Undoubtedly, if the proponents of some kind of "Drift" are correct, the Atlantic has been continually widening ever since man raised up his body upon two feet, and probably long before. As the great double-tear of the Atlantic continued to pull apart, these geologists will tell you, large quantities of sial (continental shelf) were swallowed, leaving but rapidly diminishing islands.

Undoubtedly, for the lost land in the Atlantic, the ice ages, though apparently restoring its life

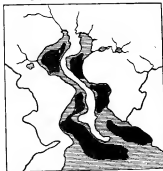
for periods, really in the long run hastened its disintegration. Thus when great amounts of water are locked up in ice and the sea-level is lowered some three-hundred feet, much lost or drowned land would disappear.

In this state of glaciation there are other complicating factors. For example, the weight of the mile-high ice sheets would basin the land upon which they rested and the shelf at this point would then tend to sink, much as a loaded ship lies low in the water when carrying a heavy cargo.

Curiously enough, geologists working upon old water levels and noting the present tipping of Pleistocene upon Pliocene, and the former upon recent formations, have noted a rocking movement of the continents. Thus when the northern lands were basined by the ice (estimate given is about one thousand feet) then the lands a few hundred miles below bulged, or arose more than the level they should have taken. Further south still, was another belt of depression.

Now it was furthermore discovered that as the ice retreated and the climatic belts followed, the wave in the substratum of the earth tended to react—though after a great lag. (At present the Scandinavian Countries are rising*, along with the north of North America.) Thus, although during a heavy glaciation, when the north was basined by the ice, the part of the sunken land which is the widest might rise proportionately with the sub-crustal flow, thus bringing a pleasant and livable land to the surface when so much of the rest of the earth was unpleasant and unlivable, yet these repeated rockings must have hastened the final break-up and foundering, by widening the great crustal rifts which bounded its borders.

To this general instability of the Pleistocene Atlantic, the great floods which the returning water unleashed when the giant retreat began in earnest, certainly contributed their share. (Antevs believes that as the seas increased, this glacial retreat may have reached a thousand feet a year!)



Map compiled by the author from Johnstone and the bathymetrical maps of the Challenger Expedition. Central Ridge, 1,000-2,000 fathoms, Basins 2,500-3,000 fathoms. The double rift valleys of the Atlantic as they probably lay on either side of the Great Central Ridge of Atlantis during the Tertiary Age. The tear started from the south, did not reach Greenland until the time of man.

AS FUTURE geologists study the Taylor-Wegener Theory, they will begin to see that most of the difficulties which bar its general acceptance arise from the fact that the Mid-Atlantic Ridge is not given the amount of consideration which it deserves. Thus the fit of the rock formations across the sunken mountain chain**, if allowance be made for the lost portions, would be found to be entirely adequate, but however many the points for which the old-fashioned geologist of stable continents and oceans may criticize the "Drift" group, he simply has no adequate explanation for the two valleys with their scores of rivers which drop into the strangely confining closed basins of the deeps.

Thus we have the picture of a great double-

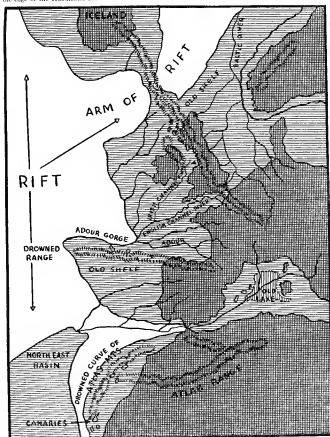
*At about 33 ft. per century—Author.

**The Labrador chains are more closely folded than the Scotch—Author.

tear whose sunken valleys had curiously conforming lakes. For many millenniums the double valley of the Atlantic must have remained at the point where these lakes filled its sides and thus carved their contours to fit the curves of the giant cliffs of the shelf. If by waving some magic wand, we could drain the water from the Atlantic down to the edge of the continental shelves and then close

the double-rift back to the width of these deeps, the ancient structure of the Atlantic would immediately leap to view. And crawling down the center like a wounded serpent, would be the sunken land!

In the Miocene, the tear was moving north, and had probably struck the latitude of Florida. The sands in oil wells drilled in Texas show that



Map compiled by author from Ansbury and Hull showing Iceland-Scotland Divide and drowned mountain ranges and rifts on the ancient shelf.

tremendous pressure was coming from the south about this time, and much volcanic ash was falling. Yet Wegener and others maintain that the tear did not reach the North Atlantic and the Arctic, thus becoming complete, until the time of the ice, which is, the anthropologists now tell us, the time of not only Neanderthal, but of Modern Man.

Thus the double-rift valley with its giant cliffs had become a double inland sea with great mountain chains shielding it from the north. The low portions of the land probably became hidden by the waters, thus leaving a series of islands, which due to the closing of the northern arctic waters, would have caused such a tropical interglacial as that which the Neanderthal youth of the Weimar Valley must have witnessed.

By studying the bathometrical maps of the Iceland-England sea, we note that the ancient river courses divided, and thus while the Baltic River with its Scottish and Dutch tributaries flow toward the Arctic, the English Channel River winds its way toward the North-East Basin. In this manner the course of the Ancient Divide with its towering peaks, across which Cro-Magnon Man probably found his way to Europe, betrays itself even though the tallest pinnacles of its ridge no longer break the surface of the waters.

Will this bridge ever again arise and cut the icy waters of the Arctic, so that we shall have a semi-tropical Europe, or has the original double-rift moved too far? It seems that the latter is likely. Although the Scandinavian Peninsula and the Land of Hudson Bay are rising, nevertheless, the Hudson River which has been more or less stable since the time of the dinosaurs, is now sinking at about two feet a century. Except for the north, the Atlantic on both sides seems to be going down at between one and two feet a century.

However, another interglacial is apparently on the way as weather stations all over the world seem to find a slight increase during the last decade

Possibly these events are of cosmic origin to fluctuations in the sun's heat, or atmospheric conditions. In another fifty or a hundred years we shall know more about these things, but in the meantime, since death shall undoubtedly interrupt your brief interest and mine, it is rather entertaining to see how the latest researches of science are beating out some of the oldest traditions of mankind.

* * *

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SEARCHING FOR RUBBER



THE present war has done more than anything else to start the inventive genius of this country on a continuous search for possible sources of rubber or rubber substitutes. Just recently, a well-known botanist, Professor T. Harper, called attention to one of America's richest, but totally neglected, sources of rubber. He was referring to the rabbit brush, a weed that grows wild in the western wastelands. The rubber comes from the inside tissues of the leaves and is similar to the rubber extracted from the well-used guayule plant.

Although it might be rather expensive to process the rubber, it should, nevertheless, be given a try because of the critical shortage of rubber existing in the United States today. Various estimates have already been made on the amount of rabbit-brush rubber that could be harvested yearly. They

vary from 10,000 tons to 250,000 tons; however, since this plant exists from Southern California to the Northern Rockies, it is quite apparent that a great potential supply of rubber is on hand. If science will harness this rubber supply to our war effort is still an open question.

The rubber of the rabbit brush is technically known as "chrysol rubber," the name coming from the plant's botanical title, "Chrysothamnus." This latter word is derived from several Greek words which mean "golden bush." The name is rather appropriate because when the plant is in bloom, every twig on it has a bunch of golden-like flowers at its tip. Incidentally this weed is a member of the plant family which includes the sunflower. And many scientists say that the sunflower also is a potential supply of rubber.

Meet the Authors

IT WAS a hectic year for the first appearance of Lee Francis. Women were shamelessly wearing their skirts cut well above the ankle and had gone so far as to powder their cheeks. Vitamins hadn't been mentioned yet, but calories were all the rage. Milk was going as high as nine cents a quart and you couldn't touch a good stein for less than forty-two cents a pound. Lindbergh hadn't been heard from, but the N C 4 was making a breath-taking trip to the Azores. Woman suffrage was more than a gag, and Babe Ruth was on his first year run toward the top.

Public school in New York, then a quick trip to Auburn. We finally settled in Malone, New York, just a bit south of the line. That's where the fun-o'-living started.

I stole torpedoes from the railroad tracks and exploded them at the risk of blowing ourselves to bits, all for the noise they made. I watched Ringling Brothers shoot a wild elephant by chaining it inside a box car and shooting it to kingdom come. I tried making a parachute out a square yard of canvas and some light rope. With a twenty-foot jump from a hay stack, I pioneered and bested the supposedly hard landings of the present day paratroops. Tom Swift And His Giant Cannon got me started on the finer books.

Nineteen years old, hitch hiking to the west coast and a quicky up the shore to Vancouver via lumber boat. Those were lean days. Six months cutting spruce and pine. Hidden in a lumber camp a hundred miles from the coast, and finally spending six months' pay in five days. Most of those days were spent getting over a headache and nursing a knife wound in the wrist. Those saloon brawls with lumberjacks at their worst were some business.

The birds went south and I, damn fool, went north. Supply boat to Seward, Alaska. Salmon, swordfish and more salmon. Six more months in a salmon cannery and I'm still combing fish scales out of my wig. A rifle and a cabin inland and I was happy, for a while.

The monthly mail plane made the mistake of dropping a bundle of magazines to me. I found six copies of *AMAZON*, went nuts over fantasy and science fiction, and as a matter of course, wrote my first story. Lots of wasted postage, three months waiting and the damned thing literally dropped back from the sky into my lap. A nice letter from the editor kept me hooked, but good.

Over a typewriter in Seattle. I lived in Jap restaurants on First Street and ate myself full of fresh fish, mashed potatoes and bread. Staring down across the slanted roofs of Seattle at the Bremerton Ferry gave me my first real conception



LEE FRANCIS

of the future. That ferry was a shiny, chrome-colored affair built to future's lines. I went to work.

About the realism and local color of "Citadel of Hate" I was there, buddy, and I ought to know. Don't let Huli fool you. The marines left a lasting impression on that island that I think will scare away the ghost of King Christophe for all time.

Drop in when you're in Seattle. You'll find me down on First Street about five in the afternoon. I'll be drinking black coffee, swilling down fresh salmon steaks and mashed potatoes. Tojo the Jap, who used to run this place, is somewhere in a California camp. He left town right after Pearl Harbor. The fish still tastes good, and the table cloth is usually white enough to stand the tracing of a new plot.

Some day, when a steady row of traffic goes up the Alaskan Highway, you'll find my camp on the shore of a little lake about half way up. The claims staked out and ready. I hope some time to drop in on the editor of *AMAZON* STORIES and talk things over like I was used to. That first letter of his, dropping out of the sky over a cabin deep in Alaska set my mind on fire. It's a great life, this writing your wildest dreams and deepest prophesies. The dreams of today are the facts of tomorrow, or isn't that original?

DISCUSSIONS



AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brickbats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

ANSWER TO WILLIAM BELL

Sirs:

This is a reply to A/S Wm. Bell's problem in physics, which was printed in the June issue of *AMAZING STORIES*. Kinetic energy is energy of movement and stored up is still energy as a wound spring is potential energy. When a wound spring is dissolved, for instance in muriatic acid, the process will be more rapid than an unwound spring. That means that the potential energy in the spring changes to two different energies, namely, kinetic (movement) and heat energy, the kinetic energy being the more rapid freeing of hydrogen gas. I hope this will answer Bell's query.

PVT. ARNE O. VIDSTRAND,
Military Secret,
U. S. A.

We got a number of answers, some of them with formulas, to this problem. The one presented was simplest, and we only add that it is not the hydrogen gas, but the molecules of the spring itself which are propelled at greater speed in the action of dissolving, which results in a cutting down of the time necessary to dissolve a wound spring.—Ed.

ANOTHER PROBLEM

Sirs:

I have a problem. I think all of your stories, covers, and articles are swell. But that doesn't go for my parents. My father says that they are junk, and my mother thinks they are impossible. It has gotten so that each month I have to smuggle the magazine into the house. What can I do?"

DON THOMAS,
3423 Firestone Blvd.,
South Gate, California.

*Why not make a bargain with your father? Ask him to read this issue, as a favor to you, from cover to cover, and then if he still thinks it is junk, we'll both be on the spot! And you might tell your mother that today, Time, Fortune, Saturday, and many of the best magazines carry articles and paid advertisements of the great businessmen of the country, which tell of exactly the same things *AMAZING STORIES* predicted and explained years ago, almost to the last final detail. Jules Verne's submarine is today our enemy's best weapon, and had Verne not described it, thus preventing an exclusive patent being issued, we might*

*today have no submarines of our own! Just recently the newspapers ran a full page ad showing floating airport islands planned for the airlines after the war. *AMAZING STORIES* can show you almost a duplicate of that ad in its story illustrations and stories of more than ten years ago! We are still giving impetus to progress through the imaginations of our writers in our pages, and besides we are providing a very healthy entertainment medium which the OWI tells us is necessary to public morale. Our magazines are sold in all army canteens. No, *AMAZING STORIES* are not impossible.—Ed.*

ERROR! ERROR! ERROR!

Sirs:

I have been reading your wonderful magazine for five years, and I think it is grand. But—I do wish you would correct at least some of the more glaring errors your authors put in their stories. For instance, in "Priestess of the Floating Skull" (which was a super-story, by the way), author Benson says "... B-18, or Flying Fortress to you."

That, fellows, is about as dumb a trick as ever I heard of. Ask any ten-year-old boy and he will tell you that the Flying Fortress is a B-17!

I consider this a real insult to our gallant air force. Anyone who doesn't know that the B-17 is the Flying Fortress simply doesn't pay much attention to the news.

A. J. KUPPLE,
Rt. 1, Box 570,
Texarkana, Ark.

Aren't you being a little tough on us? Just for the fun of it, we asked people at random what kind of a plane a B-17 was, and only one answered "Flying Fortress." Lately, war information sources have given names rather than numbers to planes, their point being that the public could not differentiate between planes just by the numbers. Of course, we admit our error, and we are glad to note you read us so closely! We'll try to keep these errors from creeping in.—Ed.

A TERRIFIC NOVEL

Sirs:

It took Don Wilcox's "Earth Stealers" to jar me loose from my prolonged silence concerning *AMAZING STORIES*. Wilcox is by far your most consistent writer, always coming through with a

hang-up job. In my opinion "Earth Stealers" was the best of his three stories concerning Lester and June Allison. A terrific novel.

HARLAN CAMPBELL,
354 W. Lorraine St.,
Glendale, Calif.

Don't coming up with some more of the same kind of story, very soon!—Ed.

A SUGGESTION

Sirs:

Why not print a brand new illustration, and then on an open competitive basis (not a contest) print the best story written around it that is received?

DANNY O'MALLEY,
6517½ Barton Ave.,
Los Angeles, California.

How about it, readers? How many of you would like to try a hand at writing a story? Just a competition open to readers, not our regular authors, the best story to be published at top rates, and any other good ones bought at our regular rates! Maybe there's an undiscovered genius among you! We've got some fine illustrations which might prod your imagination.—Ed.

WE OWE AN APOLOGY

Sirs:

I think you owe one of your authors an apology. The author is a popular gent from across the pond, and the apology is due him because of a statement made in "The Observatory" with regard to his "Collusion in Space."

The statement is this: "Festus Pragnell deserts his character, Don Hargreaves, for the second time in his career with his . . . etc." Very interesting, but slightly incredible.

As nearly as I can recall, Mr. Pragnell entered the realms of sf, sometime around 1933. Off-hand, I recall two popular stories written by him in 1933 for STRICTLY CENSORED STORIES "The Isotope Man" and "Men of the Dark Comet." More recently, your August, 1940 Fantastic Adventure presented his superb "War of Human Cats."

CHAS OLIVER,
3956 Ledgewood,
Cincinnati, Ohio.

All of Mr. Pragnell's stories in our two magazines have been Don Hargreaves stories, but two, "War of Human Cats" was one, and "Collusion in Space" was the other. Are there any other magazines? We don't pay much attention to foreign publications. So far as we know, Mr. Pragnell's "career" consists of his exclusive work for our magazines. In fact, we read everything that Mr. Pragnell writes—and he writes everything for us. Perhaps it was because we remembered 1933 that we made him one of our regular writers!—Ed.

HE DOESN'T WANT MUCH!

Sirs:

I would like to see some fact stuff on what took



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ALL "LIT" UP!

By Lester Libo

Luminescence is a property possessed by various types of animals as well as certain types of rocks. Rocks and inanimate materials which can glow are called phosphorescent. Animals which are capable of giving up a glow are said to be luminescent. The glow-worm is famous for this very property, but there are many other animals which have the ability to light themselves up.

The luminescence is achieved in a rather simple manner. The method is one of slow burning of oxygen or other burnable substances. It is controlled by the nature of the environment as well as the nature of the apparatus of the animal. Since some animals live in water, there must be a transparent mass of mucus or flesh over the luminous area. At any rate it is found both in animals which live on land and those living in the sea.

In South America a click beetle is known for the fact that its eyes emit a yellow colored light which is very bright and from the chemist's standpoint is extremely thrifty. These beetles are used in two ways by the natives. One, for lamps by placing several of these beetles in a jar, and two, by placing them in the hair and using them for ornamental purposes.

In Europe, it was erroneously reported that some birds were luminous. When this was questioned an attempt was made to find out the cause of the illumination. It was then seen that a large deposit of phosphorescent material was a favorite meeting ground for these birds, and that some of the material having been rubbed against by the birds, stuck to the birds with the result that they appeared luminous at night.

Deep sea diving has recorded luminous fish. One of the most interesting of these is the deep sea-anger. A dorsal spine of this fish has been modified into a luminous organ which has worm-like projections extending out on all sides. Since the fish can see what are apparently worms, and nothing else, they come gaily over intent on getting something for nothing. This is, of course, their downfall. They have come into the open mouth of the angler. The jaws of this odd animal have banged shut and that is that.

Many more luminescent animals are found especially in caves and at the ocean bottom. The whole fish may be luminous. In that case, rapid death occurs because to be seen and not see is death in a state of nature. Large or small luminescent spots are found on many fish usually along the lateral line, a line along the body side.

The use of these illuminators is in some cases obvious, in others not so obvious. In the case of the angler, it is a lure, a trap, while in the case of others it may merely be a method by which the animal can see its way or prey in the darkness of the everpresent night of caves and the sea bottom.

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STORIES of the STARS

By MORRIS J. STEELE

Rigel

This star is one of the super giants of the universe. It is fourteen thousand times as bright as our own sun

(See back cover)

RIGEL is in the constellation Orion, and is an 0.3 magnitude star (thus one of the brightest of the first magnitude stars), and its right ascension is 5.2, its declination -8.3. It may be found on the meridian at 8 P. M. on February 5. Its radial velocity is plus 22.0. It has an absolute magnitude of 5.5 which makes it 14,000 times as luminous as the sun. Only a few stars, one in about two million, are as luminous as Rigel, or can be termed a super giant. And only six stars are more luminous.

Little else is known of this stellar object, except that the star is extremely tenuous, and may even be little more than a cloud of dense gases at an extreme temperature.

Artist Frank R. Paul, painting an imaginary scene on a planet which forms one of many planetary bodies circling this giant sun, has used his vivid imagination to picture a scene on our back cover which almost defies description.

He has used some artistic license in showing three other bodies in his painting, also suns, one of them a double sun (Rigel), and the other, red Betelgeuse. Actually, these bodies are not anywhere near each other, and seen from the angle shown, Betelgeuse would appear no larger than it appears from our own Earth.

Nor would Rigel appear so definitely as a double star of exact dimensions. Neither would have a definable spherical shape, but would be an intense white mass becoming less intense in luminosity as its edges were reached, nor would the two stars be so close to each other, since perhaps billions of miles separate them.

However, it is true that the stellar scene from this planet would present a truly magnificent appearance, and the exotic nature of it would be heightened by the filtering of the light through an atmosphere containing gases in forms never seen on Earth. A riot of color would be almost sure to make of the scene almost a Dante's Inferno.

Naturally, with so much light available, Paul assumes that the inhabitants of this hypothetical planet (actually no planets could be observed because of the immense distance involved) would use that light as a source of power.

With that in mind, he has devised giant towers composed of light-sensitive discs, which would

receive and translate the light and heat into electrical energy, conduct that energy down into the depths of huge natural storage batteries in the depths of the planet.

With such a gigantic source of power, which would be almost continuous, the inhabitants of this planet would be able to develop a civilization of mechanical wonders that would reach the proportions writers have ascribed to that long-dreamed-of potential developer, atomic power.

Here on this planet we find sun power developed to its height, because here we have the super-giant sun of the universe, combined with the seventh brightest star in the universe.

The people of this planet Paul has pictured as being winged creatures, more than likely of an insect nature. He has given them giant aerial vessels which float like dirigibles, and use heat blasts for propulsion on the rocket principle. He has given them giant causeways between their hollow-mountain cities cast of solid plastics fused into material harder and stronger than the strongest metal.

The tremendous energy at their disposal is used in giant sun-foundries to melt and form the material used in building their cities. The slag is poured in low areas to form perfect foundations for new mountain cities, and each city is reinforced and camouflaged on the outside by slag piles of various brilliant colors.

The main reason for these artificial mountains is to provide deep valleys in which shadows fall, to provide a haven for vegetation which would otherwise be scorched to death by the heat of the giant suns.

Finally, during the time when the planet's rotation takes its surface away from the warming influence of double Rigel, the giant towers reverse the process of absorbing light and heat, and in their turn, give it off, just as it was received, thus eliminating night from the planet altogether, and warming the valleys so that vegetation can grow at all times. This is necessary because the planet is a huge one, and turns on its axis so slowly that its nights are several months long. During such a night, all life might freeze, were it not for the power towers.

★ LIVE TOGETHER AND LIKE IT ★

HUMAN beings help many animals around them. They offer in return for services rendered a comfortable easy life with no worries about getting food or shelter. Many other animals have such friends around them for much the same purpose.

A very good example of such symbiotic living is found in the case of ants and plant lice. Plant lice are small creatures which are offered much protection and comfort as well as food by the ant. Why should the ants keep such creatures? The ant's bodies are in great need of nourishment and must derive it somewhere. The best source of nutrition is the secretion which exudes from the back of these lice. This is called ant milk and the whole situation has been compared to our keeping cows.

The ants represent a rather highly developed type of social system. In addition to domesticating plant lice, they have scavengers which live among them tidying up the nests by eating the remainder of scraps of food and other debris.

It must not be assumed that ants are the only animals which have symbionts or those who return for what they take. The sea anemone and hermit crab live together in an amazing relationship. These crabs live in the shells of snails. The hermit crab places the sea anemone upon its back and transports it to new feeding grounds in exchange for the protection which the tentacles and spines of the sea anemone offer to the crab. At times the crab may lose its anemone. In this case it hunts up a new partner which it places on its back and proceeds along with it.

Since undersea animals need oxygen we find that plants which free it are often symbionts of these animals. The hydra, a tentacle plant-like animal, supports a green plant which lives on the hydra, gives it a greenish color and supplies it with oxygen. It must be understood that these plants are small and cover the body of the hydra.

Perhaps the most interesting case of these strange partnerships is that of the termite and his intestinal protozoa. These protozoa, or very small animals, are the reason that the termites can eat paper, hard wood, dry wood and still live. We know that such a diet would kill any normal type of animal. It has been reported that forty different types of protozoa live in the eleven types of termites. This figure may be wrong, but the important fact is that these little animals are vital to the termites. If removed, the termites die. The protozoa also die, for they live on the wood which the termites bring to them. The material which the protozoa excrete is, of course, the real food of the termites. If by some means the protozoa are killed, even though the termites eat a terrific amount of wood, they starve to death.

These relationships are difficult to believe, but they exist nevertheless. The best way to show their validity is to attempt to think of what man would do if his animals were removed. He, too, would perish as do the termites. Fortunately, such events do not promise in the immediate future.

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